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ABSTRACT

Intended for planners and providers of welfare-to-work and other employment and training programs, this guide explains the steps entailed in conducting a cost analysis. The following topics are discussed in the book's six chapters: use of cost analysis before programs and during their implementation; basics of conducting a cost analysis (issue of perspective, costs, the time dimension); costing out ongoing programs (costs per case versus aggregate costs, data needed, steps in estimating gross costs, conversion of gross costs to net costs); cost analysis of a real Job Opportunities and Basic Skills program and implications of program design for program costs; prediction of costs of programs that have not yet been implemented; and use of cost information in program design, bidding, and budgeting. Appended are the following: summary descriptions and main evaluation findings for selected employment and training programs; assignment rates, average length of stay, participation rates, and unit costs for employment and training activities; and program effects on Aid to Families with Dependant Children recipients. The report contains 20 references and a list of 50 recent publications on Manpower Demonstration Research Corporation projects. Forty-six tables/figures are included. (MN)

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A How-to Guide for Planners and Providers of Welfare-to-Work and Other Employment and Training Programs

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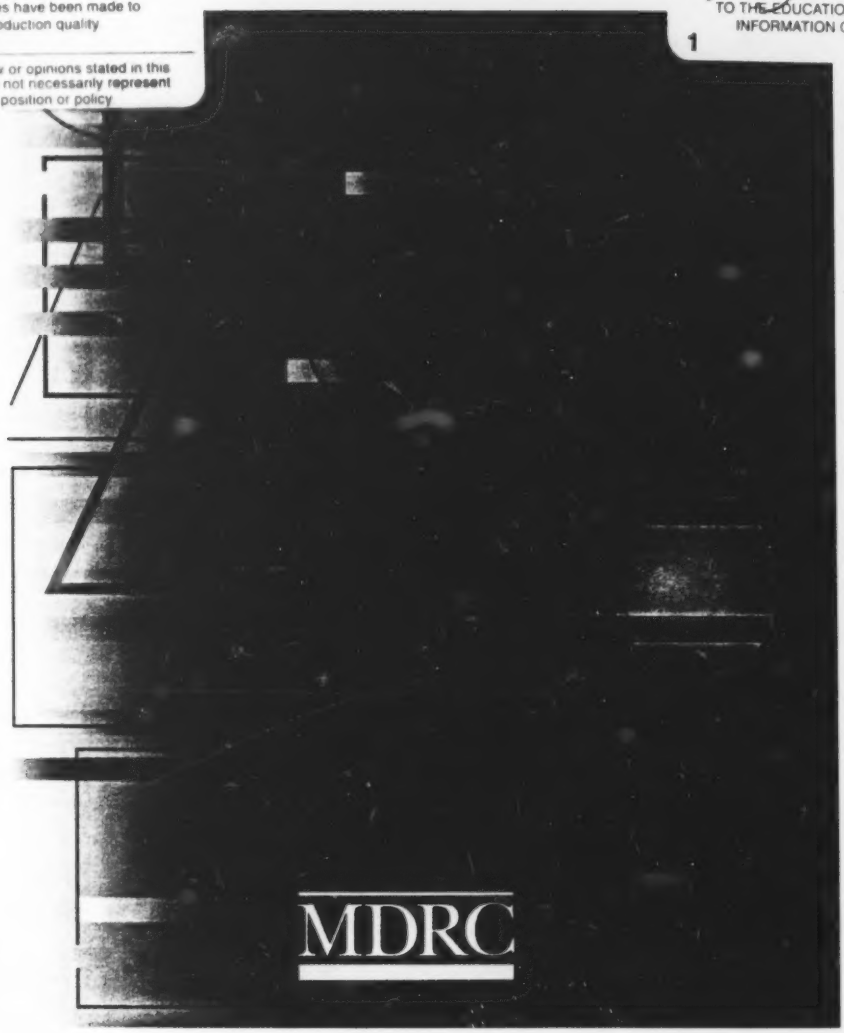

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October 1998

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The Authors

Preface

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 dramatically increased states' flexibility in designing income support, employment, and social service programs for welfare recipients. As a result, many states are experimenting with new program approaches and with contracting out service provision. Because of these developments, counties and nongovernment service providers are increasingly called upon to estimate the cost of existing and yet-to-be-implemented programs.

This guide provides a systematic approach to costing out employment and training programs for low-income people. It is geared toward practitioners in both government agencies and community-based organizations who are asked to assess the cost of programs or program components that are currently running or are still in the planning stages. The guide helps states, localities, and service providers to calculate and present cost estimates through a step-by-step approach. The steps can be directly applied by using the spreadsheets provided on the accompanying disk.

This guide is the latest publication in the Connections to Work series, a project conducted by MDRC with support from The Rockefeller Foundation and the Charles Stewart Mott Foundation. The authors are David H. Greenberg, Professor of Economics at the University of Maryland, Baltimore County, and Ute Appenzeller of MDRC. By making this knowledge accessible to program providers and planners at a time of high demand for programs that move people from welfare into jobs, and by illustrating the approach with cost figures from real programs, the authors aim to provide a highly practical guide that can be used as an easy-to-access reference book.

Judith M. Gueron
President

Chapter 1

Who This Guide Is For and How It Can Be Used

This guide presents step-by-step instructions for conducting cost analyses of both ongoing and proposed social programs for the poor. It focuses on one particular type of program: employment and training (E&T) programs that are intended to improve the performance of low-income people in the labor market and reduce their reliance on welfare payments and unemployment compensation. But it also recognizes that these programs can serve volunteers or be part of a welfare system that requires those receiving aid to participate in employment-oriented services. It is aimed at planners and practitioners in government agencies that fund, operate, and contract out such programs and in community-based or other nonprofit organizations that deliver the services.

1.1 Introduction

Employment and training programs attempt to accomplish their objectives by providing such services as job search assistance, training, education, subsidized employment in the private sector, and community service jobs in the public sector. Long viewed as an important tool for increasing employment, such programs have been an integral part of welfare reform efforts since the 1960s. Starting in the mid 1970s, some states began to mandate participation in these services as a condition of aid for many categories of recipients. With the passage of major federal welfare legislation in 1996 — the Personal Responsibility and Work Opportunity Reconciliation Act — the receipt of aid is linked closely with participation in employment-oriented services, and welfare agencies are now putting even greater emphasis on using E&T programs — which in a welfare setting are often called "welfare-to-work programs" — to help recipients achieve economic independence. By funding welfare through federal block grants to the states (Temporary Assistance for Needy Families, or TANF), the 1996 law gives states great freedom in designing E&T programs. Over time, this freedom is likely to result in important changes in the program models used to serve welfare recipients. These changes will have significant cost implications for states and localities, and it is important for program providers and planners to understand these cost implications as states plan expansions or modifications of their welfare-to-work initiatives.

This guide provides a systematic approach for "costing out" an E&T program. Cost estimates can be obtained either for the program as a whole or for specific program activities and support services. These estimates can be used for planning new E&T programs and for assessing and modifying existing programs. The approach developed in the guide can also be helpful in formulating Requests for Proposals and in responding to them. Although the scope of the guide is limited to E&T programs, the general framework can be readily adopted to obtaining cost estimates for other social service programs.

The approach presented here has proven useful to practitioners and researchers in the field of social service programs. However, to the best of our knowledge, nothing similar to this guide exists. This guide provides practical guidelines for:

- measuring program costs;
- presenting cost information in the most useful manner possible;
- dealing with issues and problems encountered in measuring costs.

Section 1.2 describes the various ways in which cost analyses of E&T programs are used. Section 1.3 provides recommendations on how the guide can best be used for conducting and interpreting cost analyses, and presents an overview of how the remainder of the guide is organized.

1.2 Potential Uses of Cost Analyses

Cost analyses of social service programs can be usefully conducted at two different points in time: prior to implementing a new program and after a program is already running (even if the program has been in operation for a number of years). As discussed next, each type of analysis can serve multiple purposes, although they differ in important respects.

1.2.1 Cost Analyses of Programs Prior to Their Implementation

Before an agency implements any new program, it must have some idea of the overall program cost in order to have sufficient funds allotted to operate the program. Moreover, it needs information on the components of those costs to determine how many new personnel will need to be hired, the cost of new equipment that will have to be purchased, the rental cost of additional office space that may be required, and so forth. Sometimes the agency sponsoring a new E&T program plans to contract out part of the operation of the program to other institutions, and cost information is needed by both parties to negotiate a contract. Thus, programs need to be costed out before they are implemented.

The usefulness of conducting cost analyses for programs that are still at the planning stage goes well beyond budgeting and resource planning. Such analyses are also useful in making decisions about whether a proposed program should be implemented in the first place. If the potential costs of the program are deemed too high, then the program may not be adopted. Even if a decision is made to go ahead with the program, several possible variants of it may exist and the costs of these competing program variants are likely to differ. In such cases, their relative cost is likely to be an important consideration in deciding among them.

As important as costs are, however, they should never be the only factor in making decisions about E&T programs. The extent to which program goals are met — that is, the extent to which the program engenders benefits such as increases in earnings or decreases in dependency on welfare payments — must also be taken into account. For example, a higher-cost program might have advantages over a lower-cost program if it also results in larger benefits.

1.2.2 Cost Analyses of Ongoing Programs

Cost analyses of social programs are conducted much more easily once a program has been implemented. Cost analyses of not-yet-implemented programs must typically be based on projections or informed guesses about such issues as the number of people who will actually receive services and the length of time participants will receive those services. Hence, they are inherently subject to considerably more uncertainty than analyses of ongoing programs, for which much information is already available.

Cost analyses of ongoing programs can serve a number of purposes, although, as will be seen later, the exact nature of the analysis will vary depending on the particular purpose it is intended to serve. The first type of use is to monitor an ongoing program, including both program activities that are performed in-house by the agency sponsoring the E&T program and those that have been contracted out. Do the costs of each program component appear reasonable? Are cost expectations being met? Was the pre-implementation cost analysis correct? If not, why not? Answering these questions is part of a learning process. The answers are also essential in determining whether the conditions in performance-based contracts that contain cost criteria are being met. In addition, cost analyses can be used to make various adjustments. For example, if the program is much more expensive than initially anticipated, it might be necessary to scale back the services provided or accept fewer participants. If it is less expensive, somewhat richer services might be provided or eligibility criteria might be relaxed.

Cost analyses can also be used to conduct evaluations of ongoing programs — that is, techniques used to assess whether existing programs are working and whether they can be improved. Program evaluations can help answer the following sorts of questions: Is an existing program working? Can it be improved? Should it be terminated? How do different programs compare? Should a program that is being operated in one place be considered for adoption in other locations?

An analysis that focuses solely on costs, such as the one described in this guide, provides only some of the information needed to respond fully to such questions — but it is a necessary first step in evaluating a program. A more formal analysis that compares program costs with program benefits, which is the most valuable way to determine a program's overall worth, goes beyond the scope of this guide. Readers who would like more information on conducting cost-benefit analyses of E&T programs might want to consult chapter 9 in *Cost-Benefit Analysis: Concepts and Practice*, by Anthony E. Boardman et al. (Upper Saddle River, NJ: Prentice-Hall, 1996).

1.3 How to Use This Guide

The guide was conceived as a template for a very comprehensive cost analysis but, because resource and time constraints may make such a comprehensive analysis infeasible in practice, shortcuts are suggested throughout. Nonetheless, readers should be aware that a more extensive analysis relies on the full template presented here, and that if compromises must be made, it is very important that both those conducting the analysis and those using the findings understand how their results will vary from those that would emerge from a more extensive analysis. They should be aware, for example, of costs that are left out or are imperfectly estimated. To illustrate how cost analyses of E&T programs can be conducted and presented, we often draw on findings from cost analyses of real programs that have been conducted by the Manpower Demonstration Research Corporation (MDRC).

The sections of this guide are highly interdependent, and concepts developed in the early chapters are often used later on, so it is recommended that you read the chapters consecutively. To assist readers who are actually conducting a cost analysis (as opposed to using findings from cost analyses), each chapter begins with an overview of its contents. In addition, text boxes are used throughout the guide to supplement the narrative. Moreover, examples are frequently used to illustrate the concepts. Examples are indicated by the symbol (e.g.) in the margin. The guide also includes a 3.5" floppy disk with Excel spreadsheets that are modeled after the step-by-step approaches developed in the text. You can use these spreadsheets for developing your own cost estimates. Whenever a reference to the disk is made, the symbol appears in the margin.

Table 1.1 (page 6) will help you determine which sections are most useful to you. The following is a brief overview of how the remainder of this guide is organized:

- Chapter 2 focuses on conceptual issues, particularly issues concerning how costs should be defined and what costs should be included as part of a cost analysis. It will be seen that deciding which costs to include in a cost analysis depends on the purposes to be served by the analysis.
- Chapter 3 provides step-by-step instructions for conducting a cost analysis of an ongoing E&T program, and discusses the data needed to do this.
- Chapter 4 presents detailed findings from a previous cost analysis, one conducted by MDRC of an E&T program for welfare recipients. The chapter illustrates how the methods described in chapter 3 can be applied in practice and how to display cost information from ongoing E&T programs. Considerable emphasis is given to the factors that cause costs to vary among programs.
- Chapter 5 describes the steps required to conduct cost analyses of not-yet-implemented programs. Particular emphasis is given to how findings from cost analyses of ongoing E&T programs can be used in costing out not-yet-implemented programs.
- Chapter 6 describes some additional ways in which the cost analyses described in the preceding chapters can be used.
- Appendix A summarizes the program features and main evaluation findings of programs discussed in this guide.
- Appendices B–F provide various values that were used in MDRC cost analyses of ongoing programs. As described in chapter 5, these values can be used to conduct cost analyses of not-yet-implemented programs.
- The Glossary lists and defines many of the terms used in this guide. It can be found at the end of this publication.

- The pocket on the inside back cover contains a disk with Excel spreadsheets. These files can be used as worksheets for adopting the steps described in chapters 3 and 5 in costing out your own program.

Table 1.1

WHICH SECTIONS OF THE GUIDE ARE FOR YOU?

If you are . . .	The most useful sections for you are . . .
A policy or cost analyst at a government agency	**Chapters 1–6.** (SKIP sections 5.3.5.a and b, which present details about computing unit costs.) **Files on disk.**
A program planner	**Sections 2.1 and 2.2.** **Chapter 4** for an illustration of the implications of program design for costs. **Sections 5.2 and 6.1** for discussion and illustrations of sensitivity analyses. **File *on_going* on disk.**
A community-based organization that is thinking about expanding its current E&T operations	**Chapter 3 and section 6.1** for help in costing out current operations and proposed changes, and in conducting sensitivity analyses to determine how programmatic changes will affect costs. **File *on_going* on disk.**
A community-based organization that has not previously been involved in an E&T program but is planning to be	**Chapter 2** for major concepts that should be considered in preparing cost estimates. **Chapter 5,** which includes a worksheet for predicting costs. **File *new_prog* on disk.** **Chapter 6** for help in conducting sensitivity analyses and developing a program budget.
A government agency that is preparing requests for bids on E&T components and wants bidders to use a uniform framework for providing cost estimates	**Sections 2.1 and 2.2.** **Chapters 4–6,** which include a uniform framework for providing cost estimates. **File *new_prog* on disk.**
An agency or organization that is bidding to operate all or part of an E&T program	**Sections 2.1 and 2.2.** **Chapters 4–6** for help in preparing cost estimates for your bid. **File *new_prog* on disk.**
An internal auditor or program administrator concerned about the efficiency and performance of an existing E&T program	**Chapters 3 and 4** for procedures for obtaining cost information that can be used to monitor ongoing programs. **Section 6.1.** **File *on_going* on disk.**
An individual responsible for overseeing a program (e.g., a comptroller or a staff member of a legislative committee)	**Chapter 2** for conceptual issues in considering costs. **Chapters 4 and 6** for information that can be obtained from cost analyses of E&T programs. **Sections 3.3 and 5.1** for help in understanding the steps required for conducting analyses of E&T programs. (SKIP the detailed explanations of how to complete each step.)

Chapter 2

Basics of Conducting Cost Analyses

This chapter starts by considering the issue of perspective — that is, who will be affected, and how, by various program costs? To appropriately measure costs, this question must first be answered. The costs to include in a cost analysis depend on the perspective that is most important — that of trainees or that of the agencies and organizations running the program. If the latter, a further decision must be made about whether to include costs accruing to all the agencies and organizations in the program, or just a subset.

The chapter also relies on some standard definitions used by accountants and economists to explore various decisions that must be made in measuring costs. In conducting cost analyses, these decisions are often made implicitly, without considering how they will affect findings from the analysis — but, as will be seen, the findings are sometimes quite sensitive to such decisions. One objective of this chapter is to clarify the circumstances under which a particular decision is most appropriate.

The final section of the chapter describes the role of discounting, adjusting for inflation, and depreciation in cost analysis. This section will mainly be of interest to readers who are conducting cost analyses, rather than to readers using findings from them.

2.1 The Issue of Perspective

A key issue in conducting cost analyses concerns the groups, agencies, and organizations to which costs accrue. In brief: Whose costs should be counted? As discussed below, there are several dimensions to this issue.

2.1.1 Alternative Perspectives

As previously suggested, E&T costs, as well as benefits, can accrue to several groups and institutions, including the various government agencies and nongovernmental organizations (NGOs) that operate program activities or provide program services, and to participants themselves. It is also possible to view costs (and benefits) from the perspective of society as a whole, where "society" is defined to include all the groups and institutions just mentioned and "everyone else" — that is, all other groups, institutions, and individuals in society apart from program participants. The differences between the perspectives of various groups and institutions are considerable. Similarly, there are major differences between the broad social perspective and each of the narrow perspectives.[1] Some costs — such as day care costs that are not reimbursed by the government — accrue only to participants, and are counted from the participant's perspective as well as from a societal perspective, but not from a government perspective. Other E&T program effects — such as stipends paid to participants — are a cost to the government, but a benefit to the participants themselves, so from a societal perspective, but not a government perspective, they cancel out. Still other E&T effects — such as reductions in welfare payments — are benefits to the government and a cost to participants, so they, too, cancel out from a societal perspective.

These various perspectives are summarized in Table 2.1. The table also depicts a slightly more complex example in which a nongovernmental organization provides

Table 2.1

EXAMPLES OF HOW E&T EFFECTS ARE VIEWED FROM ALTERNATIVE PERSPECTIVES

Effect	Government	NGO	Participant	Society
Nonreimbursed day care costs	n/a	n/a	Cost	Cost
Stipends paid to participants	Cost	n/a	Benefit	Neutral
Reductions in welfare payments	Benefit	n/a	Cost	Neutral
Provision of vocational training	n/a	Cost	n/a	Cost
Payment to vocational training provider	Cost	Benefit	n/a	Neutral

NOTE: n/a means not applicable.

1. Cost-benefit analysis often refers to a taxpayer perspective, which is almost identical to a government budget perspective. For more details, see James Riccio, Daniel Friedlander, and Stephen Freedman, *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

vocational training for E&T participants and is paid by the government for providing this service. The payment made by the government is listed separately from the provision of training because, in practice, the amount paid by the government could cover either more or less than the costs incurred by a vocational training provider, depending on the specific contractual arrangement.

2.1.2 Choosing Among Perspectives

A key decision in a cost analysis is the choice among the different perspectives described above. Consider first the choice between the societal perspective and the more narrow perspectives of the agencies and organizations that operate E&T programs. In other words, should the participant's perspective be ignored? The answer to this question turns largely on how the cost analysis will be used.

For many purposes, cost analyses need consider only costs that are incurred by the agencies and organizations involved in the operation of an E&T program. Information on such costs, for example, can be used in costing out proposed E&T programs for budgeting purposes or for monitoring ongoing programs. For other uses — such as decisions about whether to adopt a new program or expand or scale down an existing program — it would be ideal to conduct a formal cost-benefit analysis. Such an analysis would include the participant's perspective as well as the perspectives of government agencies and NGOs, and would involve measuring both benefits and costs. However, such an analysis requires an investment of considerable time and resources. Indeed, firms that specialize in cost-benefit analyses of E&T programs can best conduct such evaluations. While less than ideal, a cost analysis that ignores benefits and the participant's perspective may be all that is feasible and is still very helpful.

A government agency with overall responsibility for operating an E&T program, referred to here as the "program agency," obviously incurs costs as a result. However, other government agencies and institutions (for example, community colleges) and NGOs may also incur costs. For some purposes, such as resource planning and monitoring, each agency or organization may be interested only in those costs that it incurs. For these purposes, even the program agency will mainly be interested in its own costs. A nongovernmental organization that is bidding to provide a particular E&T service, for instance, will obviously be concerned with predicting its own costs, but not those that occur elsewhere. When agencies and institutions want to focus only on their own costs, the cost analysis is considerably simplified because many costs can be ignored. Moreover, it is typically easier for an agency or organization to obtain information on its own costs than on costs accruing elsewhere.

For other purposes, however, a program agency should consider all costs, regardless of where they occur. This would be true, for example, of cost analyses that are being used to decide which of several competing programs to adopt or whether to expand or cut back on an ongoing program. In such cases, however, it is still often useful to report costs separately for each agency and organization that incurs costs. In conducting a comprehensive cost analysis in which costs incurred by the program agency, as well as by other agencies and organizations, are included, it is important not to double-count. For example, the cost incurred by a vocational training provider and the program agency's payment to the vocational training provider should not be summed.

In the operation of E&T programs, costs may be incurred at each level of government — federal, state, and, local — with the precise allocation among levels somewhat arbitrarily determined by various pieces of legislation and negotiated agreements. Each level of government will, of course, be especially concerned with the costs that it incurs. Thus, in a comprehensive cost analysis of an E&T program that attempts to incorporate all costs, it is useful to report costs separately for each government level.

2.2 Costs

2.2.1 Definition of Costs

As previously discussed, this guide is aimed at persons within the agencies and organizations funding and operating E&T programs and providing services used by E&T programs. Consequently, the remainder of the guide focuses on costs accruing to these agencies and organizations and ignores the perspective of participants and, hence, that of society as a whole.

Therefore, we define the costs of an E&T program as expenditures on the resources required to run the program. These expenditures result directly from purchases that are necessary to provide services under the program, including expenditures on staff salaries and fringe benefits; purchases of goods, services, office space, and equipment; vendor payments; and day care and transportation. They also include special payments that are an integral part of operating the program, such as subsidies paid to employers who hire program participants and stipends or allowances paid to the program participants themselves.

Under this definition, costs do not include program-engendered changes in transfer payments — for example, Temporary Assistance for Needy Families (TANF), Medicaid, and unemployment compensation — even if these payments increase unintentionally, or changes in the administrative costs of running transfer programs. Similarly, effects on the earnings and tax payments of program participants are excluded, even if participant earnings and tax payments decline. Costs borne by program participants are also not included under this definition — for example, work-related expenses such as child care and transportation costs that result because the program increases employment or hours worked. None of these items represents expenditures that are directly incurred by agencies and organizations in running E&T programs.

For most purposes, the value of donated equipment or time would also not be counted as costs because such donations do not result in expenditures by the agencies and organizations operating E&T programs. However, if the program is being considered for adoption elsewhere, it is important that the agencies and organizations considering it be provided information on the market value of donated time and equipment because they may not receive these goods as donations, but have to purchase them instead.

As should be apparent, a cost analysis of an E&T program provides only a very partial look at program effects. For that reason, the interpretation of a cost analysis should

account for what is left out as well as what is included. It would make little sense to attempt to minimize expenditures on an E&T program without also considering the implications for benefits from the program — for example, whether the effects of the E&T program on earnings or on the receipt of welfare payments will diminish with the reduction in E&T costs.

2.2.2 Gross Costs Versus Net Costs

Costs were previously defined as expenditures on the resources required for operating an E&T program. These expenditures can be measured in either gross terms or net terms. *Gross costs* are relatively straightforward to understand and measure. They are simply direct outlays required to operate a program. Gross costs are usually sufficient for use in monitoring an ongoing E&T program or in administering performance contracts. Information on gross costs is also useful in planning for a new program. It is also usually appropriate to use gross costs in selecting one program model over another. In addition, if another site is considering adopting the program, information on the program's gross costs is useful because it allows the site to compare the gross costs of its own current program with a possible alternative.

Net costs are more complex than gross costs and considerably more difficult to compute. Net costs are the *change in costs* that result from a specific decision — for example, a decision to adopt a new program, to expand or scale down an existing program, or to modify some component of an existing program (for example, to increase class size). Hence, net costs are more appropriately used in making decisions of this sort than are gross costs. Net costs, like gross costs, are also useful for budget planning purposes. Finally, net, rather than gross, costs should always be used to conduct formal cost-benefit evaluations of E&T programs. Thus, information on net costs is useful to decision-makers at both government agencies and private-sector service providers.

2.2.3 Start-Up Costs

The costs required to initiate a new E&T program — expenditures on curriculum development, writing regulations, developing computer software, and so forth — are often called *start-up* or *development* costs. Start-up costs also include costs that result from learning how to operate a new program. For example, costs could fall over time because of various improvements that are made in program efficiency.

There is an important distinction in the treatment of start-up costs when estimating the net costs of a not-yet-implemented E&T program versus an ongoing program. If an E&T program has not yet been implemented, then whether start-up costs are actually incurred depends on whether or not the program is adopted; they are part of the cost of adopting the program and should be included in estimating the program's net costs. However, in the case of an ongoing program, start-up costs have already been incurred and no decision that is made with respect to the ongoing program, including terminating it, can affect these costs: they are fixed, or "sunk." Thus, start-up costs should not be included as part of the net costs of ongoing programs.

WHAT IS THE DIFFERENCE BETWEEN NET COSTS AND GROSS COSTS?

To understand how net costs differ from gross costs and why they are more appropriately used for certain purposes, consider a decision on whether to replace an existing E&T program with a new one. If the proposed new program is adopted, then expenditures on the existing program will no longer be incurred. To compute the change in costs resulting from adopting the new program (that is, its net costs), the gross cost of the existing program must be subtracted from the gross cost of the proposed program. This may not be the end of the process, however.

e.g.

For example, the agency that would run the proposed program might already have furniture and classroom space that it is not using in running the current program, but would use for the new program. Unless this furniture and classroom space will be used for some non-E&T purpose, but cannot serve this purpose once the new E&T program is implemented, using the existing furniture and equipment in operating the E&T program imposes no additional costs. Thus, in computing the net cost of the new program, these elements are appropriately subtracted from the program's gross cost.

Similarly, in decisions concerning whether to go ahead and adopt a proposed program, the cost issue typically concerns how much more the new program will cost than an existing one, not its absolute (gross) cost. An E&T program that results in little or no additional costs is not very expensive, even if its gross costs are large. In budgetary planning for the program, the important issue is not the total amount of staff and equipment required, but the additional staff that must be hired and the additional equipment that must be purchased. Likewise, if a decision is being made about whether to expand or contract an ongoing program, the relevant issue is the additional costs or savings that would result — in other words, the change in net costs.

To help ensure that start-up costs are excluded, cost analyses of ongoing programs are sometimes delayed until after the program has reached a *steady state* — that is, until after the program has reached the point at which its costs over time are expected to be relatively stable.

2.2.4 Average Costs Versus Marginal Costs

The *average cost* of an E&T program is simply the cost per participant. Marginal costs are the additional costs that result from serving an additional participant or the cost savings that result from serving one less participant.

In conducting cost analyses of E&T programs, marginal costs are often very difficult to measure. Thus, average costs are typically used instead. Although this decision is appropriate for some purposes, such as resource planning for a new program or monitoring an existing program, it is not appropriate in decisions concerning expanding or contracting an ongoing program. For that purpose, marginal costs should ideally be used instead. However, in practice, as will become evident in chapters 3 and 5, it is not always easy to estimate marginal costs, and average costs are often used as the best available approximation.

e.g.

EXAMPLES OF AVERAGE VERSUS MARGINAL COSTS

Marginal cost can differ considerably from average cost. Consider the following examples:

- Certain pieces of equipment and certain supervisory activities may be required regardless of whether an E&T program is large or small. For example, whether an E&T program is in every county in a state or in only a few counties may have relatively little effect on the number of persons involved in administering it at the state level. If that is the case, as the number of program participants expands, program costs will not grow as quickly. Consequently, marginal costs will be less than average costs.
- If the size of an E&T class is expanded, it may not be necessary to increase the space used or the number of teachers. In that case, the marginal costs will again be less than the average costs.
- If it is necessary to make major new purchases or to rent new facilities in order to expand, marginal costs may exceed average costs. This may be especially important in the case of small organizations that begin bidding to provide E&T services.
- In expanding an E&T program, the new participants may differ in important respects from those currently enrolled. For example, they may have fewer or greater barriers to employment and, hence, require less expensive or more expensive services. In the first instance, the marginal costs will be less than the average costs; in the latter case, they will be greater.

2.2.5 Joint Costs

Some resources are used for several purposes at once. For example, the same computer terminals at a welfare agency might be used to administer welfare payments *and* to track clients enrolled in E&T programs. When resources are used for multiple purposes, their costs are sometimes called *joint costs.*

In a cost analysis, resources that are used jointly raise the difficult issues of what proportion of the total cost of the resource to assign to the program being analyzed. Any treatment of joint costs is likely to be somewhat arbitrary. One possibility, and the one most commonly used in practice, is to allocate cost on the basis of the proportion of the resource used for each purpose.

e.g.

For example, if one-fourth of the time spent using computer terminals involves the E&T program being analyzed, then 25 percent of the total cost of the terminals would be assigned to the program in question. In contrast, 100 percent of the cost of terminals used exclusively to track E&T participants would be allocated to the program.

A better approach would be to attempt to determine whether the resource would have been purchased at all in the absence of the program. If the answer is yes, then the program engenders no additional costs and none should be allocated to the program. If, however, the resource is purchased only as a result of the program, then its total cost should be allocated to the program, even if it is also used for other purposes.

2.2.6 Regular Versus Special Costs

Regular costs occur in the normal operation of an E&T program; they are essential to running the program. *Special costs*, as the name implies, are not essential to the operation of a program. A good example is provided by the cost of conducting cost analyses themselves. Cost analyses conducted in connection with implementing a new E&T program or to monitor an existing program would usually be viewed as regular costs. It is difficult to imagine implementing an E&T program without first costing out the program, and analyzing cost data for monitoring purposes is a routine part of operating an E&T program. Conducting a cost analysis as part of a cost-benefit evaluation of an ongoing E&T program, in contrast, is a special cost. Although useful, it is not a necessary component of operating the program. While regular costs should be counted in conducting a cost analysis, special costs usually should not be.

2.3 The Time Dimension

Cost analyses of not-yet-implemented E&T programs typically attempt to predict the annual costs that will result from adopting the program. Annual cost figures are especially appropriate for budgetary and planning purposes. However, as discussed in some detail in chapter 5, annual costs may vary considerably from one year to the next, and it is important that this variation be taken into account.

As indicated in chapter 3, cost analyses of ongoing E&T programs, in contrast to those of not-yet-implemented programs, usually examine the costs incurred by specific groups (or cohorts) of persons who enrolled in the program during a fairly narrow time span — for example, over a three-month period. Many (or even all) of the members of a cohort of E&T enrollees may remain active in the program for far less than a year. Moreover, individuals from outside the cohort may also enroll in the program during the same year. Thus, costs incurred by the cohort do not correspond to annual program costs.

Even if all the program costs incurred by a cohort accrue over a relatively short period of time, however, the E&T program may still affect members of the cohort for many years after the program ends. For example, as a result of the program, the earnings received by a former participant may increase, and this increase may continue to be received as long as the participant remains in the work force. While these long-term effects must be taken into account in cost-benefit evaluations of ongoing E&T programs, they rarely need to be considered in pure cost analyses of these programs.

2.3.1 Role of Discounting in Conducting Cost Analyses

Viewed from the present, dollars that need not be paid until some future date do not impose as great a cost as the same amount of dollars that must be paid today because they can be used for some other purpose until they are paid. For example, they could be invested and earn interest. If E&T costs are projected and summed over several years, as

THE MECHANICS OF DISCOUNTING

The procedure required for discounting is relatively simple. For each future year for which costs are estimated, the following formula can be used:

$PV(C_y) = C_y/(1+d)^y$

In this formula, y is a number that represents the future year for which costs are estimated (year 1, year 2, year 3, and so forth), C_y is the dollar value of the estimated costs for that year, $PV(C_y)$ is the present value of C_y, and d is the discount rate. The value of d is controversial among economists, but, in practice, values between .03 and .1 are typically used. A good approach is to select two or more values within this range and see whether the results of the cost analysis are very sensitive to using these alternative values.

e.g.

To illustrate discounting, assume that it is predicted that a not-yet-implemented E&T program will cost $1,500,000 in its first year of operation, $1,200,000 in its second year, and only $900,000 in its third year. Without discounting, total costs over the three-year period would be (inappropriately) predicted to be $3,600,000. Using a discount rate of .05, total costs would be predicted to be $3,294,461 and are computed as follows:

$\$1{,}500{,}000/(1+.05)^1 + \$1{,}200{,}000/(1+.05)^2 + \$900{,}000/(1+.05)^3 = \$3{,}294{,}461$

they might be for budgeting purposes, it is necessary to adjust to account for the fact that current costs impose a greater burden than costs that occur in the future. This adjustment is called *discounting*. The discounting procedure, in effect, allows one to deduct the interest that could be earned until the costs are incurred and must be paid. The resulting dollar figure is called the "present value" of the costs. When present values for different years have all been similarly adjusted, they can be appropriately summed.

2.3.2 Adjusting for Inflation

The purchasing power of a dollar erodes over time because of inflation. Consequently, if the data used in a cost analysis are several years old, it is helpful to those interpreting the analysis if costs are stated in current dollars. This is especially important if changes in the costs of a program over time are being examined or if two or more programs are being compared and the cost data for the different programs were collected during different years.

Cost figures can be converted to current dollars by multiplying them by an adjustment factor obtained from the Consumer Price Index (CPI). Alternatively, the values used by the U.S. Department of Commerce to adjust estimates of the gross domestic product for inflation (the GDP deflator) can be used instead. It does not matter very much whether the CPI or the GDP deflator is used; they result in adjustments of similar magnitude. Up-to-date values for the CPI and the GDP deflator can be obtained from the *Monthly Labor Review* and the annually published *Economic Report of the President*, respectively.

THE MECHANICS OF THE INFLATION ADJUSTMENT

The inflation adjustment factor is easily computed as follows:

Adjustment Factor = I_{cy}/I_{py},

where I_{cy} is the value of either the CPI or the GDP deflator for the current year and I_{py} is the corresponding value for the year for which the cost data are available.

e.g. For example, if the cost data were two years old and the CPI equals 200 for that year and 220 for the current year, the two-year-old cost figures can be adjusted to current prices by multiplying them by 1.10 (or 220/200). Specifically, a two-year-old cost of $100 would be multiplied by 1.10 in order to obtain a current dollar value that equals $110.

2.3.3 Adjusting for Large Equipment Purchases

Durable goods purchased by an organization, such as computer terminals and furniture, have a useful life of many years. The organization's expenditure on such equipment should not be assigned entirely to the year it is made, but should be spread over all its years of useful life. Straight-line depreciation is the easiest of the methods that can be used to do this. For a description of alternative methods, see Kumen H. Jones et al., *Introduction to Financial Accounting: A User Perspective* (Englewood Cliffs, NJ: Prentice-Hall, 1996, chapter 8).

THE MECHANICS OF STRAIGHT-LINE DEPRECIATION

Straight-line depreciation can be accomplished in three steps. First, the number of years the equipment to be depreciated will be used must be determined. Second, if the equipment will then be sold, its sales price (which is usually called its "salvage value") must be predicted. Third, the annual cost of the equipment is determined by deducting its salvage value, if any, from its purchase price, and then dividing this total by the number of years it is expected that the equipment will be used.

e.g. For example, if equipment that is purchased for an E&T program for $50,000 will be sold after five years for $10,000, then $8,000 (or [$50,000–$10,000]/5) would be an appropriate value to use for the equipment in determining the annual cost of the program.

Chapter 3

Costing Out Ongoing Programs

The objective of this chapter is to provide the information you need to conduct a cost analysis of an ongoing employment and training program for the purpose of monitoring or evaluating this program. The methods described in this chapter can also be used in determining the costs of individual program activities (such as vocational training) and support services (such as child care). The chapter delineates the data needed to conduct the analysis and describes the required steps.

Cost analyses of ongoing E&T programs are described before cost analyses of not-yet-implemented programs are discussed because the data required for the former are available from the program itself. Cost analyses of not-yet-implemented programs, in contrast, require predictions; but, as discussed in chapter 5, these predictions can usually be based, in part, on information about the costs of similar ongoing programs. Moreover, as indicated in chapter 2, in determining the net cost of a not-yet-implemented program, the costs of the existing program should be subtracted from the predicted costs of the proposed program. Thus, it is helpful to understand how cost analyses of ongoing E&T programs are conducted before conducting analyses of not-yet-implemented programs.

Readers who use the information from cost analyses but do not plan to conduct one of their own will be mainly interested in sections 3.1 and 3.2 and the text box found at the end of section 3.4. Section 3.1 discusses why costs are typically estimated on a per case basis, while section 3.2 describes the data needed for conducting a cost analysis. The text box at the end of this chapter provides a brief summary of the steps that should be followed in conducting cost analyses of ongoing programs.

3.1 Costs per Case Versus Aggregate Costs

As mentioned in chapter 1, employment and training programs may be broadly divided into two categories: voluntary or mandatory. *Voluntary E&T programs* provide training for individuals who apply for them and meet certain criteria of need, such as being unemployed or having low incomes. *Mandatory E&T programs* require participation by recipients of government transfer payments who meet certain other criteria — for example, with respect to the length of time they have been on the transfer program rolls.

The distinction between voluntary and mandatory E&T programs is rather formal in theory, but may blur in actual practice. Not every qualified person who applies to a voluntary program, for example, is necessarily accepted and, owing partially to imperfect enforcement, not every person who meets the criteria for a mandatory program necessarily participates. Nonetheless, the distinction is important because cost analyses of the two types of programs differ in important respects. Cost analyses of ongoing voluntary E&T programs usually compute the costs engendered by a typical individual who has been accepted into the program *(costs per accepted case)*. Often, this is further limited to a typical accepted case that actually participates (that is, receives services) in the voluntary program *(costs per participant)*.[1] Cost analyses of ongoing mandatory programs, in contrast, generally calculate the costs generated by a typical transfer payment recipient who has been assigned or referred to the program *(costs per referred case)*. For mandatory programs, unlike voluntary programs, cases that receive program services and those that do not must be included in computing average costs because both incur costs. Service recipients obviously engender costs; cases that do not receive services engender costs as a result of expenditures needed to enforce the program's participation requirement.

As just indicated, program costs for both voluntary and mandatory E&T programs are typically computed on a per case basis, rather than being aggregated. However, there are situations in which it may be desirable to determine aggregate costs — for example, for budgeting purposes. The costs of ongoing programs are usually computed on a per case basis (be it case accepted or referred), rather than being aggregated, for several reasons. First, in comparing costs over time or among different programs, the total number of persons served by the program will drive aggregate costs. Thus, better comparisons can usually be obtained by looking at costs per case. Second, as discussed earlier, for many purposes, the costs of E&T programs should be compared with the benefits from these programs, such as increases in earnings and reductions in transfer payments. However, these benefits are almost always measured on a per case basis. Consequently, if program costs are to be compared with program benefits, they must also be computed on a per case basis. Third, information on the costs of ongoing E&T programs often serves as a key input in costing out programs that have not yet been implemented. As

1. For simplicity, in the remainder of this guide, we refer only to costs per accepted case in discussing voluntary programs. However, it is equally valid to estimate costs per participant for voluntary programs. This is not valid for mandatory programs because, as discussed in the text, those who receive services and those who do not both incur costs.

shown in chapter 5, use of this information is greatly facilitated if it is reported on a per case basis. Thus, this chapter focuses on the computation of program costs per case.

In interpreting costs that are reported on a per case basis, it is important to keep in mind that they are an average of higher costs for some cases and lower, or even zero, costs for others.

e.g.

In the case of a voluntary program, for example, some unemployed persons may find jobs between the time they are accepted into the program and the time services actually become available; other cases drop out shortly after they begin to receive services. Similarly, in the case of a mandatory program, some individuals may leave the transfer program rolls (perhaps because they have found employment) between the time they are referred to the program and the time services are ready to begin. Moreover, other referred individuals may be excused from participation prior to the time when services become available (perhaps because of illness or because they find part-time employment). Still others may refuse to comply with the requirements of the mandatory program, even if their transfer benefits are reduced as a result. Thus, costs-per-case estimates include small values for cases that incur small costs (for example, only costs resulting from a mandatory program enforcement process) and zero values for cases that incur zero costs.

3.2 Data Needed for Cost Analyses of Ongoing E&T Programs

3.2.1 Records Program Agencies Should Keep

For administrative purposes, many agencies that are operating E&T programs already maintain all or most of the data needed for cost analyses of these programs, often in computer-retrievable form. The only items that must be added are those that provide information not already being collected. As indicated in later sections, because different agencies maintain data in different ways, procedures used to conduct a cost analysis of an E&T program operated by one agency will differ somewhat from procedures used to conduct an analysis of a similar program run by another agency. In other words, to some extent, the form of the data determines the nature of the analysis. Moreover, even within the same agency, efforts may have to be made to reconcile data sets that are maintained in different formats.

To the extent time permits, it is important to attempt to ensure that the data collected for the cost analysis are as accurate as possible. If there are errors in the data, they may need to be "cleaned" by first making detailed inquiries about individual data entries that seem inconsistent, implausible, or otherwise suspect, and then correcting these items. If this is not possible, other sorts of adjustments may be required.

The following data items are critical to cost analyses of ongoing E&T programs:

- time spent by program participants in each program component;
- allowances paid to program participants — for example, for day care or clothing;
- vendor payments made on behalf of program participants — for example, for day care;
- subsidies paid to employers who hire program participants;
- stipends paid to those participating in the program;
- the salary and fringe benefits of each staff member involved in the operation of the E&T program being analyzed, even if many of these persons devote only part of their time to the program;
- special purchases (such as forms, computers, and furniture) made specifically for the program's use;
- office overhead rates or, alternatively, the costs of the various items that go into overhead (for example, the rental value of office space, telephone bills, and equipment costs), even if these items are used for multiple purposes and, hence, are not exclusively devoted to the E&T program being analyzed.

e.g.

A $5 daily allowance was paid for attendance at job search workshops run as part of an E&T program for Aid to Families with Dependent Children (AFDC) applicants conducted during the 1980s.[2] By comparing the number of persons who attended the workshops with the number for whom allowances were recorded, the MDRC research team determined that there were allowance records for only about 5 percent of those who actually received allowances. To adjust for this discrepancy, MDRC inflated the recorded allowance amounts.

3.2.2 Data Needed from Outside the Program Agency

The agency with direct responsibility for an E&T program may not perform many of the services participants in the program receive. A welfare agency may operate an E&T program for public assistance recipients, for instance, but much of the actual training may be conducted by local community colleges. Depending on contractual arrangements, the welfare agency may or may not make tuition payments to the community colleges. However, even when such payments are made, they may not accurately reflect the full cost incurred by the colleges. The colleges may depend on revenue collected from property taxes, as well as tuition, but the welfare agency may be required to pay no more than the standard tuition amount. Other payments to outside organizations — for example, those made to day care providers — may, in contrast, reflect the full costs of providing a service. In the latter case, the cost analysis can rely entirely on the program agency's records, but in the former case, information must be obtained directly from the service provider.

2. Barbara Goldman, Daniel Friedlander, and David Long, *Final Report on the San Diego Job Search and Work Experience Demonstration* (New York: MDRC, 1986).

Cost information provided by organizations other than the program agency are unlikely to be as detailed as the agency's own records since the agency has no control over external records. However, in most instances, the information provided by external sources is sufficient.

3.3 Steps in Estimating the Gross Costs of Ongoing Programs

This section lists the seven steps required to determine the gross costs of ongoing programs, discusses why each step is needed, and describes approaches that can be used to complete each step. Section 3.4 then describes how net costs can be obtained, once gross costs are estimated.

A spreadsheet that is based on the seven steps is available on the accompanying disk.

A word of caution: The seven steps described in this section can be used to estimate the gross costs of virtually any ongoing program. The procedures for completing each step, however, depend on the data and time available to the analyst. Specific program circumstances may require the analysis to vary in detail from some of the suggestions in this section, and approximations and compromises may be necessary. Those who are extremely time-constrained might want to consider using some of the values for other E&T programs that are provided in Appendices B–F (although, as discussed in chapter 5, these values are really more appropriately used in costing out a not-yet-implemented E&T program). It is important to be aware of the errors that may result from any necessary approximations and compromises, and to ensure that users of the cost analysis are apprised of potential errors.

Step1. Enumerate Program Components

Each of the activities and support services provided by the E&T program undergoing a cost analysis needs to be listed. Program activity categories might include orientation, assessment, job search, basic education, vocational training, work experience, and so forth. Support service categories could include child care, transportation, and allowances paid to program participants.

The exact categories will, of course, be determined by the nature of the program itself. The categories should be sufficiently inclusive so that each cost engendered by the program falls under some category. To help ensure that program costs do not get overlooked, it may be helpful to develop a detailed flow diagram of the sequence of E&T activities. (Examples of such a diagram appear in the following chapter in Figures 4.1 and 4.2.) In general, it is better to use more detailed, rather than less detailed, categories, since categories can always be combined later. Information about the costs attributable to a narrowly defined program activity or support service is useful, for example, in

forming judgments as to whether expenditures on the component are too high or too low. Realistically, however, each category must be defined so that data on unit cost, participation rates, and length of participation that correspond to the category are obtainable. Hence, the category definitions will be at least partially determined by the data available for the cost analysis. Moreover, the number of categories should not be so large that they are unwieldy or confusing to work with.

Step 2. Compute Unit Costs

Unit costs are simply the costs of providing a particular program component to one person over a specified time period. The appropriate time period to use in computing unit costs will vary with the component being examined. For example, the unit cost of program orientation is usually most readily computed as the cost of providing one session to one person, while the unit cost of job search, work experience, transportation allowances, or child care could be computed as the cost of providing these activities and support services for either a week or a month. If the cost of providing a particular program component is shared by two organizations — as when, for example, the E&T sponsoring agency and a community college divide the cost of providing vocational training — it is usually both easier and more useful to compute the unit cost incurred by each organization separately.

a. The Basic Computation. Unit costs can be determined by first calculating the total cost of providing a given program component over a specific time period (for example, a session, a school semester, a week, a month, or a year) and then dividing by the number of individuals who participated in the activity or received the service over the corresponding time period. Thus, data are needed on both total cost and number of participants during the time period. (As discussed in chapter 2, start-up costs should usually be excluded from estimates of the costs of ongoing programs. Thus, the time period used for computing costs should ideally be a "steady state" period for the program — that is, a period of relative stability.)

e.g.

Assume that an ongoing E&T program spent $100,000 on job search during a one-year steady-state period and that, during this period, an average of 100 persons participated in job search each month. Then, the unit cost for job search equals

$100,000 annual costs/(100 participants x 12 months)

= $83.33 per participant per month.

It is important to note that in calculating unit costs in this manner, any case management costs that are part of the activity will be included in the measure of unit costs. One example is the cost of enforcing the participation requirement in a mandatory program. Moreover, all the costs of a program are ascribed to those individuals who actually participate in the activity. This could be important if some persons who are assigned to the activity fail to show up, as these "no shows" may nonetheless engender

costs as a result of staff time required to process paperwork and encourage them to attend. These costs will be included in the numerator of the unit cost measure, but not in the denominator.

e.g.

If, in the illustration appearing above, $95,000 of the $100,000 expended on job search was incurred by the 100 job search participants, and the other $5,000 was engendered by 20 no-shows, the entire $100,000 would be ascribed to the 100 participants — because it took $100,000 to produce 100 participants. Moreover, as the remaining calculations are all based on persons who participate in each program activity, costs engendered by no-shows would be inappropriately left out of the final cost estimates if costs incurred by no-shows, as well as those engendered by job search participants, were not included in the numerator of the unit cost ratio.

b. Determining Staff Time. If each E&T program staff person served program participants exclusively and engaged in only one activity (for example, instruction, case management, counseling, or administering voucher payments) and resources such as rental space and computers were similarly exclusively dedicated, computing unit costs would be greatly simplified. In practice, however, each staff member often serves both persons in the program being analyzed and persons outside the program, and engages in a variety of activities (such as orientation sessions, counseling, and individual job-search monitoring). Physical resources may similarly serve a multiplicity of functions.

For the purpose of cost analysis, it is critical to determine the proportion of total staff time and personnel costs devoted to the E&T program being analyzed. The cost of physical resources must be similarly allocated between program and nonprogram uses. In addition, allocations must be made among the various program components so that costs can be appropriately assigned to the various program component categories listed under step 1.

There are at least three different ways to allocate staff time among different activities: time studies, time sheets, and interviews. Many government agencies routinely engage in time studies in which selected staff members are monitored by others to determine how their time during a workday is allocated. Findings from these studies can be readily adopted for use in an E&T cost analysis if the time studies collect information in a manner consistent with the needs of the cost analysis. For instance, if there is a desire to differentiate between time spent in helping prepare a client for a job interview and time spent in counseling a client on resolving internal family problems, then the instrument used in the time study may have to be modified to distinguish between these two activities. Furthermore, if the information is not otherwise available, it may be necessary to record the number of persons who receive each type of counseling. If possible, it is also often useful to differentiate between time spent in performing a task for program participants and time spent performing the same task for persons outside the program.

Time sheets are similar to time studies, except that staff members themselves are responsible for keeping track of the time they spend on different tasks. The time sheets are usually filled out over a period of several weeks. Data on the number of persons who participate in each program activity during these weeks could also be recorded on the

time sheets if not available elsewhere. Once again, the instrument used must be consistent with the requirements of the cost analysis. It may be desirable, for example, to separate staff time spent in case management from time spent in other ways; this can be accomplished by using a carefully designed time sheet. For illustrative purposes, the time sheet used by MDRC in its recent cost analysis of two welfare-to-work programs in Minnesota — the Minnesota Family Investment Program (MFIP) and STRIDE, the state's version of the federal-state Job Opportunities and Basic Skills Training (JOBS) program — is shown in Table 3.1.

In interviews, staff members (or their supervisors) are asked about the amount of time they typically devote to each activity of interest. This approach is, in general, inferior to the use of time studies or time sheets because it relies on the staff's ability to recall their time allocations retrospectively. This is likely to result in errors, especially when relatively small amounts of time are devoted to a particular activity. Thus, if possible, the use of interviews should be limited to supplementing information obtained from time studies or time sheets.

Once staff time is allocated among activities, further steps may be necessary to allocate time devoted to performing a particular activity between persons in the E&T program that is being analyzed and persons outside the program. This is obviously unnecessary if the task is performed exclusively for those in the program or if staff performing the task can differentiate between the time they devote to each group. This is not always feasible, however; counselors may not even know whether a particular client is in the E&T program. In such circumstances, time can often be allocated on the basis of the number of persons in each group — assuming that, on average, the time spent performing the task for a program participant is roughly the same as the time spent performing the task for a nonparticipant. This assumption may not, of course, be valid.

c. Treatment of Overhead. Once the fraction of time each staff member devoted to various activities is known, this information can readily be converted to dollar figures by multiplying the fractions by the staff members' salaries over an appropriate time period, such as one year. After doing this, it is important to distinguish between the costs that are included in the resulting estimates and the costs that are left out.

e.g.

Specifically, the estimates clearly include the program costs that accrue to line staff who are directly involved in various E&T activities. However, costs associated with support staff, such as secretaries, and supervisors may be left out of the estimates. In addition, fringe benefits may or may not have been included in the salary figures used to obtain the estimates. Finally, the costs of various physical resources, such as computer systems, furniture, physical facilities, and telephones, will definitely be left out of the estimates.

For the purpose of this discussion, costs that are included in the estimates are referred to as *personnel costs* and costs that are left out are referred to as *overhead costs*.

The estimates of personnel costs can be used in assigning overhead costs to various E&T activities. This is usually done in one of two ways. The first method is to multiply an organization's *overhead rate* — that is, the organization's total annual expenditures divided by its total annual expenditures on staff salaries — by the estimate of the staff

Table 3.1

MINNESOTA FAMILY INVESTMENT PROGRAM/STRIDE TIME SHEET Staff Members' Time Allocation to Program Components

Name _____ County _____

Title _____ Organization/Provider _____

Activity	Date										TOTAL HOURS
	11/11	11/12	11/13	11/14	11/15	11/18	11/19	11/20	11/21	11/22	
1 Up-Front Mandatory STRIDE Orientation											
2 MFIP/STRIDE Orientation/Intake/Initial Assessment											
3 Operation and Monitoring of MFIP/STRIDE Career Exploration and Skill Building Workshops											
4 Operation and Monitoring of MFIP/STRIDE Job Club											
5 Operation and Monitoring of MFIP/STRIDE Job Search Classes/Workshops											
6 Operation and Monitoring of MFIP/STRIDE Individual Job Search Activities											
7 Operation and Monitoring of CWEP											
8 Basic Education Support and Monitoring											
9 Post Secondary Education and Vocational Training Monitoring and Support											
10 MFIP/STRIDE Employment-Related Services and Monitoring											
11 MFIP/STRIDE Recruitment											
12 MFIP/STRIDE Child Care Referrals/Arrangements											
13 MFIP/STRIDE Job Development/Job Placement/Informal Job Search											
14 MFIP/STRIDE Ongoing Case Management											
a) MFIP/STRIDE Sanctioning/Non-Compliance Notification											
b) Coordination with Other Agencies											
c) Other MFIP/STRIDE Case Management Activities											
15 Other MFIP/STRIDE Functions (not related to individual participants)											
16 Operation and Monitoring of Food Stamp Employment and Training											
17 Operation and Monitoring of Other Programs											
18 Vacation, Sick Leave, Breaks											
TOTAL HOURS											

NOTE: A copy of the instructional material that accompanied this time sheet can be obtained upon request from MDRC.

SOURCE: MDRC.

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37A

personnel costs for each activity. In making this calculation, the salary values used to compute the denominator of the overhead ratio must include only the salaries on which the estimates of personnel costs were based. The numerator, however, should include the costs of *all* the personnel and physical resources that are either directly or indirectly involved in running the E&T program. The costs of personnel and resources that have nothing to do with the program should be excluded from the numerator, however. As the numerator of this rate will include both personnel costs *and* overhead costs, while the denominator will include only the former, the rate itself will exceed one.

e.g.

An overhead rate of 2.5 would imply that the total costs of the program are two and a half times larger than the personnel costs. Thus, multiplying the estimate of personnel costs of an activity by the overhead rate results in inflating or marking up the estimate so that it includes both the personnel costs and the overhead costs associated with the activity. If personnel costs were, say, $50,000, and the overhead rate was 2.5, total costs (personnel costs plus overhead costs) would equal 2.5 x $50,000, or $125,000.

The second approach is to multiply total annual expenditures on each overhead item (secretaries' salaries, supervisors' salaries, computers, rental space, telephone, and so forth) by the fraction of the organization's total staff costs devoted to each activity.

e.g.

Say that 5 percent of the total staff costs of an organization that was operating an E&T program was required to pay staff for aiding program participants in their search for a job and that the organization's rental expenditures were $100,000 a year. Given this hypothetical situation, $5,000 (or .05 x $100,000) of rental expenditures would be assigned to the job search component of the program.

In using either of the approaches just described, it is important to recognize that durable equipment purchased by an organization, such as computer terminals and furniture, have a useful life of many years. As discussed in chapter 2, a depreciation method should be used to spread the organization's expenditures on such equipment over the equipment's years of useful life.

Step 3. Select the Analysis Sample

Steps 4 and 5 in the cost analysis of ongoing E&T programs require estimating measures of participation for individuals accepted into voluntary programs or referred to mandatory programs. But it is often unnecessary to obtain the data needed to make such an estimate for every individual who has ever been accepted into or referred to the program being analyzed. A subgroup, if sufficiently large, will often suffice. If a subgroup of individuals is used for the cost analysis, however, it is important that this subgroup be representative of all those who are accepted or referred.

e.g.

The analysis sample might consist of a cohort of individuals who were accepted or referred over a given time interval, ideally a period during which the program was in a steady state. If this cohort is sufficiently large, then a subsample of members of the cohort could be randomly selected. If only those with social security numbers ending in 3 or 7 were selected, for instance, 20 percent (two numbers out of a possible ten) of the cohort would be randomly selected.

Step 4. Determine Participation Rates

After the sample to be used in the cost analysis has been selected, the fraction of the sample that participated in each of the activities and received each of the support services listed in step 1 must be determined. In completing this step, it is often useful to first define the minimum level of activity required before an individual will be counted as participating in a particular program component — for example, receipt of at least one day of vocational training or reimbursement for at least one week of child care.

Three sources of data can be used to determine participation rates: (1) a computerized management information system that tracks the E&T activities in which individual members of the analysis sample participated and the support services they received, (2) a review of the individual hard-copy case files of members of the analysis sample, and (3) surveys administered either in person or by telephone to each member of the analysis sample. A computerized tracking system that contains complete, accurate, and clean data provides an ideal means of computing participation rates. If such a system is not available, however, then the other two data sources must be used instead. Unfortunately, surveys are subject to recall error, while case files are laborious to use and may contain incomplete information. However, using surveys and case files to verify and supplement one another can increase accuracy. Moreover, if the computerized tracking system exists but contains incomplete or inaccurate information, its reliability can be checked and improved by using data from the other two sources.

NONPROGRAM COSTS

Some E&T participants may enroll in various training and education activities — for example, a computer training course or college — even after they have formally completed the E&T program, perhaps stimulated by their experiences in the program. Such activities, which are sometimes called *nonprogram activities*, are outside the scope of the E&T program. Yet, they obviously engender costs, even though the program agency will bear little or none of these costs. For most purposes, these *nonprogram costs* can be ignored. However, in conducting a very comprehensive cost analysis, perhaps as part of a cost-benefit analysis, they should be estimated. To do this, it is quite likely that surveys will have to be used to determine participation rates in nonprogram activities, as the necessary information is unlikely to be available in either computerized management information systems that are operated by the program or in program case files. Because program agencies will, of course, be more interested in program costs than nonprogram costs, the two types of costs should be recorded separately.

Step 5. Determine the Average Length of Participation

For each member of the analysis sample who participated in a given E&T activity or received a given support service, the duration of participation or receipt must be determined. Averages can then be computed for each program component. The time period that is used to compute the length of participation must be consistent with the unit cost measure.

e.g.

If the unit cost of vocational training is measured as the cost of providing vocational training for one month to one person, then length of participation must be measured as the number of months that a typical vocational training participant received such training.

The data sources that can potentially be used to determine average lengths of participation are the same as those that can be used to determine participation rates: computerized tracking systems, case files, and surveys. Again, data from each of these sources can be used to check the reliability and make adjustments in data from the other sources. It should be noted that survey data on length of participation in a given program activity are almost surely subject to greater recall error than survey data on whether individuals participated in the activity at all.

Step 6. Compute Gross Cost per Case for Each Program Component

Step 6 is mechanical in nature once steps 1–5 have been completed. The cost of each program component for a typical person who has been accepted into or referred to the program is determined by first multiplying the unit cost of the activity or support service (as determined by step 2) by the average length of participation in the component (as determined by step 5). The product is then multiplied by the component's participation rate (as determined by step 4). Thus, costs for the component are averaged over both participants and nonparticipants in the component, even if the costs incurred by the latter group are zero.

e.g.

Suppose it costs $130 to provide one month of vocational training to one person and that those persons who received such training remained in it for an average of six months. Then, the cost of vocational training would be $780 (or 6 x $130) for each person who received it. However, if only 10 percent of the analysis sample actually participated in vocational training, the cost per case for this program component would be only $78 (or .10 x $780).

Step 7. Compute Total Gross Cost per Case

This step is also mechanical. An E&T program's total gross cost per accepted or referred case is computed by simply summing all the cost-per-case values obtained in step 6.

It is important to recognize that the cost-per-case values for the various program components can be appropriately added together only because they are all computed by averaging across the same group of individuals. Specifically, all the members of the analysis sample are included in the averages, regardless of whether those individuals actually participated in particular program components or not. Averages that are instead computed for groups that differ in composition and size cannot be appropriately summed.

e.g.

All 1,000 members of an E&T program analysis sample participate in an orientation session at a cost of $10 per person, while one member of the sample receives a four-year college education at a cost of $50,000. Total program cost per case is obviously not $50,010 [or $10 + $50,000] but is instead only $60 [or $10 + ($50,000/1,000)]. In other words, the average costs of the two program components cannot be summed unless they are computed over the same group of individuals.

3.4 Converting Gross Costs into Net Costs

Chapter 2 suggested that for certain purposes, such as cost-benefit evaluations of ongoing E&T programs and assessing what it cost to replace a previous E&T program with the current program, the costs of ongoing programs are more usefully measured in net, rather than gross, terms. Gross costs remain relevant, however, because measuring the net costs of an ongoing E&T program requires that its gross costs be measured first.

Except in the case of a formal cost-benefit evaluation, net costs can, at least in principle, be fairly readily determined if estimates are available of the gross cost per case of *both* the ongoing program *and* the program it replaced (assuming there was one). As mentioned in chapter 2, both estimates should ideally be obtained after the programs reach a steady-state level of operation so that they exclude start-up costs. Given such estimates, computing net costs would involve the following four steps. (If there was no previous program, then the first three of these steps can be ignored.)

1. If the cost-per-case estimates for the two programs pertain to two different years, then the estimate for the older program should be adjusted for inflation using the method described in chapter 2 (section 2.3.2).

2. Costs per case should be transformed to aggregate annual costs for both estimates by multiplying costs per case by the number of cases accepted or assigned during the year for which each estimate was obtained (see the box below). This step will account for the possibility that the number of cases in the old program and the current program may have differed.

3. The aggregate annual cost of the old program should be subtracted from the aggregate annual cost of the current program.

4. As discussed in chapter 2, the cost of any equipment that was not used in the old program, but is used in the current program *and* would not otherwise be used for some non-E&T purpose, should be subtracted from the estimate obtained in step 3, above.

Notice that in the four steps above, the net cost estimates rely on comparing individuals who are accepted into or assigned to two different programs. These two groups of individuals may, of course, differ in a number of respects — demographic composition, education level, work experience, motivation, and so forth — and these difference may, in turn, create cost differences between the two programs. For most purposes, this is quite appropriate. After all, if a decision is made to replace one program with another, the costs resulting from that decision are accurately reflected by the difference in the costs of the two programs regardless of the causes of these differences.

THE TRANSFORMATION FROM COSTS PER CASE TO AGGREGATE ANNUAL COSTS

Costs per case can be used to calculate aggregate annual costs for ongoing programs by multiplying costs per case by the number of cases newly accepted (in the case of a voluntary program) or newly assigned (in the case of a mandatory program) during a year. Cases that are already in the program at the beginning of the year incurred costs during both that year and the previous one. Although the costs they incurred during the current year are omitted from the calculation, this is roughly offset by the fact that some of the costs incurred by the newly accepted or assigned cases will not be incurred until the following year. For purposes of computing annual aggregate cost, the estimate of the average length of participation (step 5) may have to be scaled back for those program components in which individuals often participate for longer than 12 months, such as college or child care. To do this, no values for individual cases should be permitted to exceed 12 months in determining the average length of participation.

In cost-benefit evaluations, in contrast, net costs are usually estimated by comparing costs engendered under two program regimes by two groups of individuals who are as similar as possible. Persons assigned to or accepted by the program being evaluated are usually referred to as the "program group," while those under an alternative program regime are usually called the "comparison group." The reason for comparing two similar groups is that the effects of the program being evaluated on such outcomes as earnings and welfare payments would ideally be determined by comparing the earnings and welfare payments of the same group of individuals under both program regimes. Because individuals cannot be under two program regimes at the same time, this is obviously impossible. Consequently, an approximation is obtained by comparing the earnings and welfare payments of the program group with the earnings and welfare payments of a similar comparison group. To maintain comparability, exactly the same approach is used to determine net costs in a cost-benefit evaluation.

Because members of a comparison group do not have access to the services provided by the E&T program, they are likely to obtain those services from a wide variety of other sources, and comprehensive data on such nonprogram E&T services are essential. Moreover, these data must be similar to those for members of the program group so that appropriate comparisons can be made. In addition, the funding sources of E&T services received by members of the comparison group must be carefully tracked because the

agencies and organizations that provide these services may differ from those operating the E&T program being analyzed.

Obtaining an appropriate comparison group for a cost-benefit analysis, measuring the E&T costs incurred by this group, and then comparing these costs with those incurred by the program group involves numerous technical issues that are well beyond the intended scope of this guide. Thus, the discussion here is limited to brief comments on a few general points. (There is an extensive professional literature that focuses on these and related topics. Agencies that wish to conduct a cost-benefit evaluation of an E&T program should obtain help from experts with experience in using comparison groups to conduct such analyses.)

3.4.1 Obtaining Comparison Groups for Cost-Benefit Analyses

In many situations, some of the persons who would otherwise be accepted into or referred to an E&T program are instead randomly assigned to a "control" group. While ineligible to take part in the E&T program, members of the comparison group can receive whatever employment and training services are otherwise available to them. The major advantage of this "random assignment" strategy is that — when research samples are large — persons in the comparison group will, on average, be very similar to persons in the program group in terms of education, employment history, motivation, and so forth, differing only by chance. Thus, E&T costs incurred by members of the program group and members of this comparison group can legitimately be compared.

Sometimes, however, random assignment is not appropriate or feasible. For example, agencies running E&T programs may be reluctant to follow the random assignment strategy because they do not want to deny services to some persons who would otherwise qualify, or they may simply find it inconvenient administratively to treat otherwise similar persons differently. Further, there may be programs for which the supply of program "slots" and potential applicants are approximately equal, and diverting some people to a comparison group would lead to a reduction in services. Finally, in some programs the goal may be to completely "saturate" a community or group of families with services, so random assignment would undercut the program model.

In such instances, a number of possible alternative strategies are available for obtaining comparison groups. We mention only two here. (For a more comprehensive discussion, see Daniel Friedlander, David H. Greenberg, and Philip K. Robins, "Evaluating Government Training Programs for the Economically Disadvantaged," *Journal of Economic Literature*, December 1997, pp. 1809–1855.) In the first, the costs incurred by persons accepted into or referred to the E&T program being analyzed are compared with E&T costs incurred by similar persons prior to the introduction of the program. The second possibility is to compare E&T costs at locations where the program operates with E&T costs at locations where it does not.

One problem with nonrandom assignment approaches such as these two is that the environmental circumstances — economic conditions, for example — facing the program and comparison groups may differ in important respects. These differences could affect participation rates and length of stay in E&T programs, which would, in turn, affect E&T costs. A second problem is that the personal characteristics of the two groups

being compared may differ in important respects, and these differences may affect the amount of E&T services they receive and, hence, the E&T costs they incur. Some of these differences (for example, demographic differences) can frequently be controlled for through various statistical procedures, but others (differences in motivation) often cannot.

A word of warning: the comparison group should never be limited to only those persons who actually receive E&T services. Instead, the comparison group should include persons who are as similar as possible to those accepted into or referred to the program of interest, *regardless of whether or not they receive E&T services*. Limiting the comparison group to only those who actually receive services ignores possible differences in program participation rates that cause E&T costs to differ.

A SUMMARY OF THE STEPS FOR ESTIMATING THE GROSS COSTS OF AN ONGOING PROGRAM

Step 1. **Enumerate program components.** List all the components of the E&T program — that is, all the program activities and support services.

Step 2. **Compute unit costs.** Compute the average cost of providing one unit (for example, an hour or a month) of each of the program activities and services listed in step 1 to one person.

Step 3. **Select the analysis sample.** Select a representative group of cases that have been accepted into or referred to the E&T program. Program costs will be estimated for these cases.

Step 4. **Determine participation rates.** Estimate the fraction of the cases selected in step 3 that participated in each of the program activities and received each of the support services listed under step 1.

Step 5. **Determine the average length of participation.** Estimate the average length of time over which those cases that participated in each program activity remained active and those cases that received each support service continued to obtain the service.

Step 6. **Compute gross cost per case for each program component.** Compute the cost per case for each program component as follows:

unit cost (step 2) x participation rate (step 4)
x average length of participation (step 5)

Step 7. **Compute total gross cost per case.** Compute the total gross cost per case for the E&T program by summing all the cost-per-case values obtained in step 6.

Chapter 4

A Real-World Cost Analysis of an Ongoing Program: Implications of Program Design for Program Costs

This chapter identifies the key factors that cause cost estimates to vary and presents detailed findings from an actual cost analysis — specifically, MDRC's cost analysis of JOBS programs in three different communities. The tables from the MDRC analysis provide examples of how information from your own cost analysis can usefully be presented. The material in section 4.2 demonstrates how the steps described in chapter 3 can be used to determine the cost of an actual ongoing E&T program. Our intent is to clarify how these steps can be applied in practice. Finally, the factors that caused costs to vary among the JOBS programs in the three communities are examined in some detail, with a focus on one community, Riverside, California. These factors are important because cost estimates from ongoing E&T programs provide a major source of information that can be used for costing out not-yet-implemented programs. The factors that cause costs to vary from one program to another, however, must be taken into account if information from ongoing programs is to be most appropriately used for this purpose.

Readers who use the presented estimates to conduct cost analysis of a not-yet-implemented program will find the cost figures presented in this chapter useful for conducting sensitivity analysis of the sort described in chapters 5 and 6.

Readers who are interested in a cost analysis of ongoing programs will find Table 4.8 of particular interest as it illustrates how the steps developed in chapter 3 can be readily used in a spreadsheet. Table 4.8 can be replicated using the file *on_going* on the disk.

4.1 JOBS Cost Analysis

The JOBS program was created by the 1988 Family Support Act and was the successor to the Work Incentive (WIN) program.[1] JOBS mandated participation in employment and training activities by AFDC recipients with minor children more than three years old.[2] It established participation targets and required welfare agencies to provide a mix of services with an emphasis on job search, education, and training. As part of the seven-site JOBS Evaluation — now titled the *National Evaluation of Welfare-to-Work Strategies*[3] — MDRC recently completed cost analyses of JOBS programs in three sites: Grand Rapids, Michigan; Atlanta, Georgia; and Riverside, California. The evaluation is funded by the U.S. Department of Health and Human Services (HHS), with additional support from the U.S. Department of Education.

For purposes of the evaluation, Grand Rapids, Atlanta, and Riverside each ran two parallel programs: one that focused on rapid job placement, called the Labor Force Attachment (LFA) model, and a second program that focused on education and training, the Human Capital Development (HCD) model. Both of these program models have been widely used in the United States. The HCD model focuses on skill-building and education prior to employment. Proponents of the HCD approach believe that high-paying, stable jobs will keep welfare recipients from again needing to seek public assistance. They assert that allowing welfare recipients to prepare for "better" jobs through education and training will help them stay off welfare permanently. The LFA program model, in contrast, focuses on fast placement of program participants in the labor market. The position of supporters of the LFA approach is that almost any job is a positive first step. They argue that advancement will come through acquiring a work history and training on the job.

In the JOBS evaluation, MDRC has utilized a random assignment research design. Thus, in Grand Rapids, Atlanta, and Riverside, MDRC randomly assigned AFDC recipients to one of three research groups, which were established in each site: a group that received JOBS services under the HCD model, a group that received JOBS services under the LFA model, and a control group that did not receive any JOBS program services but were free to seek out, on their own initiative, training and education programs available in their communities. Random assignment assured that the individuals in the three groups at each site had similar characteristics. As a result, the three groups are comparable. This means that the costs of the two program models can be appropriately compared for each of these three sites.

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1. The specific provisions of JOBS (but not its overall aims) have been largely superseded by the federal Personal Responsibility and Work Opportunity Reconciliation Act. The terminology "JOBS" and "JOBS programs," however, remains in common use.

2. States had the option of extending the mandate to welfare recipients with children older than one year.

3. Referred to as "the evaluation" or "the JOBS evaluation" in the remaining chapters.

4.2 Findings

The costs of different employment and training programs vary for a number of reasons, including differences in client characteristics and economic conditions across E&T sites and differences in the program approaches selected by state and local government agencies. Differences in program approaches help determine the program activities provided, the level of participation in these activities, and the level of support services provided. These factors are well illustrated by the three-site JOBS cost analysis. Table 4.1 summarizes the cost findings for the LFA and HCD approaches at the three JOBS sites over a two-year follow-up period beginning with each sample member's entrance into the study (month of random assignment). In general, the HCD program approach was more expensive than the LFA approach. However, even within one approach, costs varied substantially among the three sites. For example, the Riverside LFA site incurred costs that were less than half those at the Grand Rapids LFA site.

Table 4.1

GROSS COSTS OF THE LABOR FORCE ATTACHMENT AND HUMAN CAPITAL DEVELOPMENT APPROACHES WITHIN TWO YEARS AFTER ORIENTATION

Site and Cost Component	Cost per Referred Case: Labor Force Attachment (LFA)	Cost per Referred Case: Human Capital Development (HCD)
Atlanta		
Operating costs	$1,956	$2,901
Support services	883	1,020
Total	2,839	3,921
Grand Rapids		
Operating costs	$2,812	$4,322
Support services	297	417
Total	3,109	4,739
Riverside (full sample)[a]		
Operating costs	$1,105	—
Support services	122	—
Total	1,227	—
Riverside (subsample without a high school diploma or GED)		
Operating costs	$1,060	$2,759
Support services	103	231
Total	1,163	2,990

SOURCES: Gayle Hamilton, Thomas Brock, Mary Farrell, Daniel Friedlander, and Kristen Harknett, *National Evaluation of Welfare-to-Work Strategies: Evaluating Two Welfare-to-Work Program Approaches — Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Sites* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1997). The Riverside LFA subsample data are unpublished data from MDRC's research.

NOTES: Estimated costs are in 1993 dollars.

Where data are not applicable, dashes are used.

a. The Riverside HCD approach was available only to sample members without a high school diploma or GED certificate. The cost data for this subsample are shown in the last section of the table.

Without being aware of the key factors that cause the costs to vary across sites and approaches, it is tempting to cost out a not-yet-implemented program by using cost estimates calculated for other programs before making necessary adjustments to these estimates. Unfortunately, you cannot simply choose from these estimates in costing out your own E&T program; rather, you need to come up with your own estimates to cost out your program. Estimates from ongoing programs do provide a useful starting point, however. Therefore, this chapter provides you with cost estimates from the JOBS evaluation. Appendices C–F present additional estimates from the JOBS evaluation and from various other programs evaluated by MDRC. Additionally, chapter 5 presents tools that will help you in tailoring these estimates to your program. All this is intended to help you save time and effort in costing out your program. However, note that the JOBS program and the programs presented in the appendices are mandatory programs. Consequently, their findings might not be directly applicable to voluntary programs.

This section focuses mainly on cost findings for Riverside. The sample for Riverside's HCD program included only individuals without high school diplomas or GED certificates. Riverside's LFA program approach, like Atlanta's and Grand Rapids', included people with high school diplomas or GED certificates, as well as persons without these education credentials. In order to examine the differences in the two approaches in the Riverside program site, it is important to use samples that are as similar as possible. Therefore, the findings for Riverside that are presented in this chapter for both the LFA and HCD approaches are based on only program participants without a high school diploma or GED certificate. Findings based on the full LFA sample are presented in Tables C.1, D.1, E.1, and F.1. Findings for Riverside's full LFA sample and the subsample without a high school diploma or GED certificate differ only slightly, however. Members of the subsample were much less likely than members of the full sample to attend college or receive vocational training or work experience, but were slightly more likely to participate in basic education and job search activities.

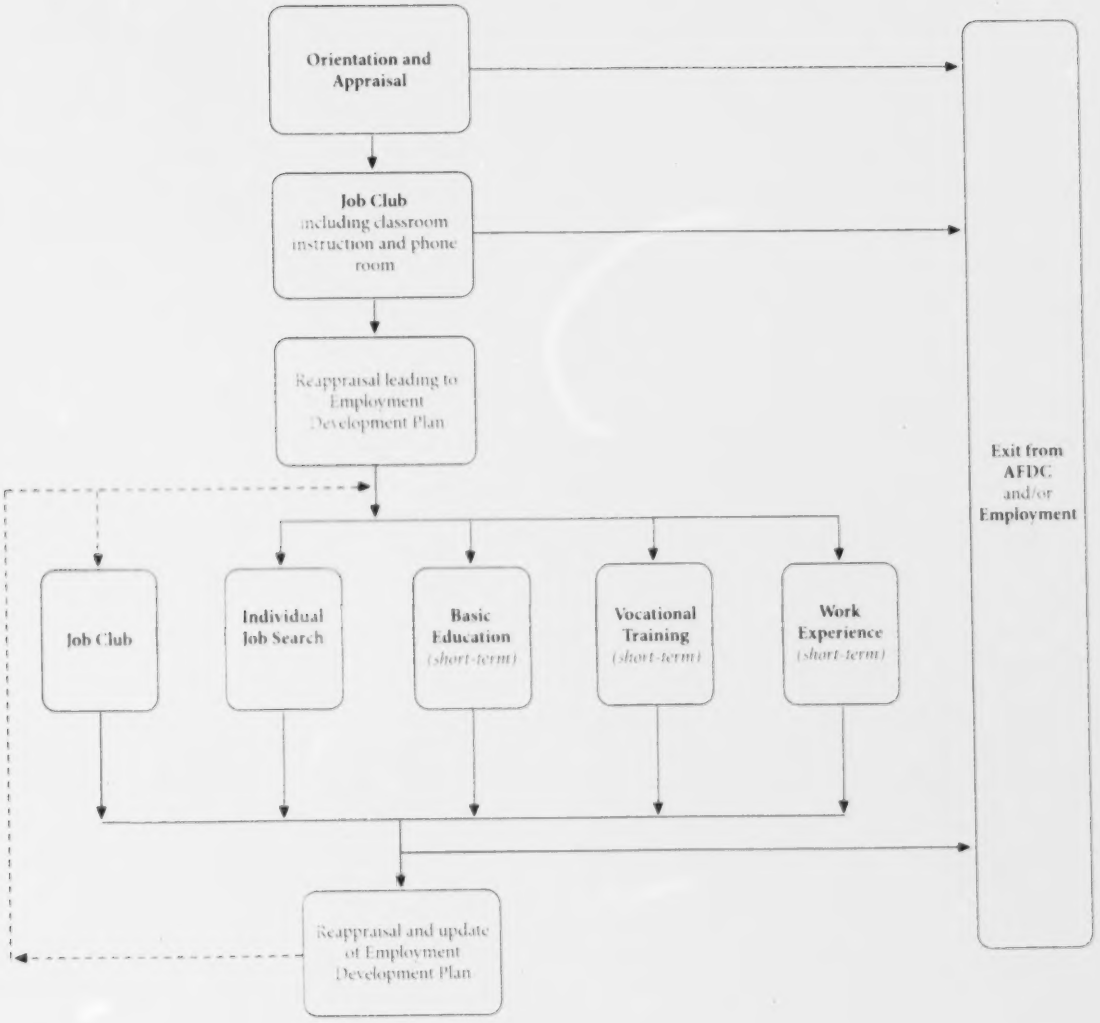
The remainder of this section covers the following: First, the section explores the effects of different programmatic approaches on costs. This is followed by a discussion of unit costs. Next, the section examines the effects of the length of stay in an activity on costs. Then, the way in which the rates of participation in various program activities influences costs is covered. Support service costs are considered next. The section concludes with a discussion of how site and area characteristics affect program costs.

4.2.1 Effects of Program Models on Costs

Figures 4.1 and 4.2 depict the intended service sequence for the LFA and HCD programs, respectively. Because the LFA approach focuses on quick job placement, clients were generally strongly encouraged to seek employment after an initial assessment. To help them do this, primary LFA components included job search activities such as job clubs and job development. The HCD approach, in contrast, focuses on in-depth education and training for program participants. Thus, the majority of LFA cases were assigned to participate in job search. In contrast, only a few HCD cases were assigned to job search as their first activity, with the majority referred to basic education, vocational

Figure 4.1

INTENDED SEQUENCE OF ACTIVITIES IN A LABOR FORCE ATTACHMENT WELFARE-TO-WORK PROGRAM


Orientation and Appraisal
Job Club including classroom instruction and phone room
Reappraisal leading to Employment Development Plan
Job Club
Individual Job Search
Basic Education (short-term)
Vocational Training (short-term)
Work Experience (short-term)
Reappraisal and update of Employment Development Plan
Exit from AFDC and/or Employment

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

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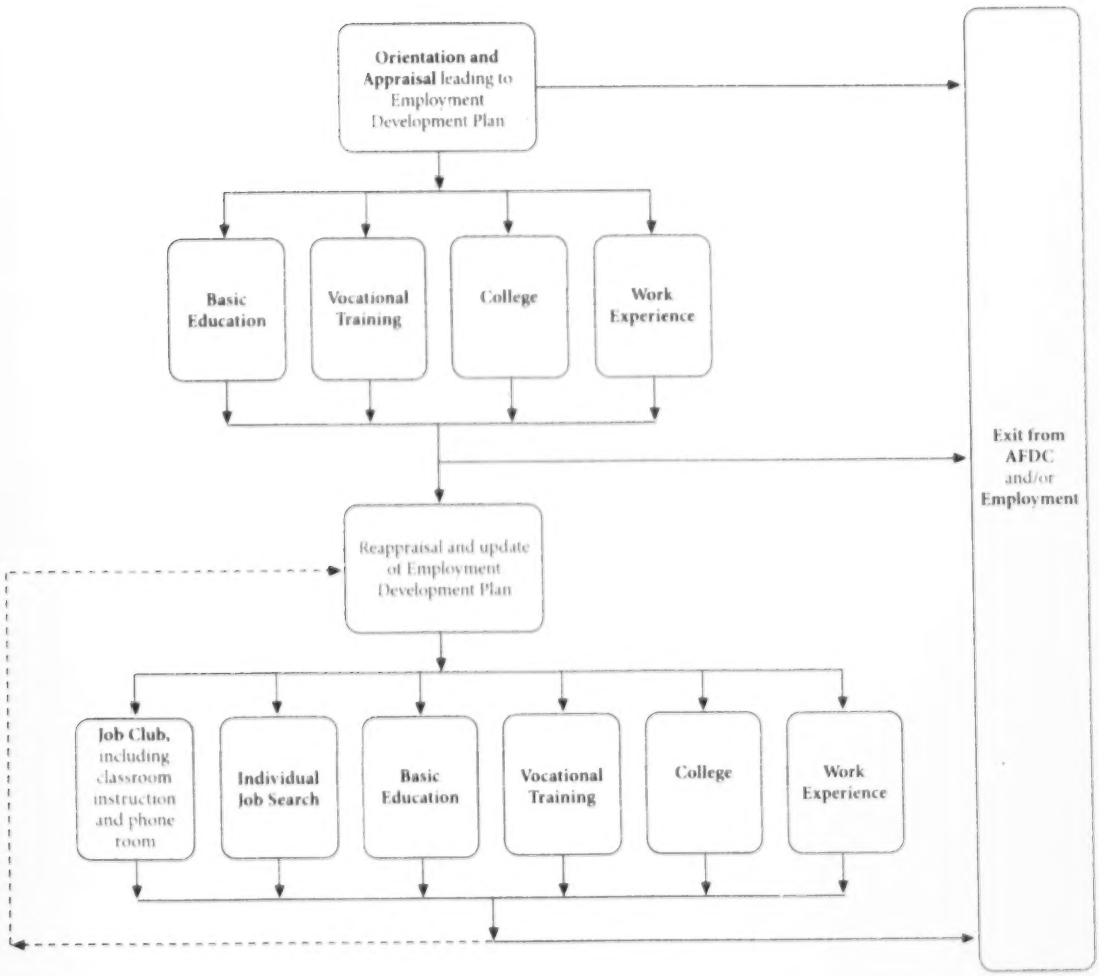
Figure 4.2

INTENDED SEQUENCE OF ACTIVITIES IN A HUMAN CAPITAL DEVELOPMENT WELFARE-TO-WORK PROGRAM



SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

training, and work experience instead. In Riverside, for example, 68 percent of the LFA cases were assigned to job search upon their program entry, compared with only 2 percent of the HCD cases.

These differences in assignment rates between the two program models have important implications for costs. As derived from Table 4.2, in Riverside's LFA program, 74 percent of the gross costs[4] were allocated to job search activities and only 7 percent to basic education. The Riverside HCD program, in contrast, allocated 64 percent of its gross costs to basic education and only 19 percent to job search.

Table 4.2 presents Riverside's gross costs per referred case for each service. The estimates pertain to costs incurred by members of the LFA and HCD research samples within two years following their assignment to the program. As discussed in chapter 3, these cost estimates are averaged over both those persons who participated in the various service components and those who did not. The costs of the individual activities include the case management costs associated with these activities, including enforcing requirements to participate in them.

4. The definition of gross costs as used in this guide differs from the definition used in the JOBS evaluation. As defined in step 7 in chapter 3, gross costs include only costs incurred by the program. However, in the JOBS evaluation, nonprogram costs, as well as costs incurred by the program, are included in the gross cost measure. For a discussion of nonprogram costs, see chapter 3.

Table 4.2

GROSS COSTS OF RIVERSIDE'S LABOR FORCE ATTACHMENT AND HUMAN CAPITAL DEVELOPMENT APPROACHES WITHIN TWO YEARS AFTER ORIENTATION

	Labor Force Attachment (LFA)			Human Capital Development (HCD)		
Activity	Welfare Dept. Cost	Non-Welfare Dept. Cost	Gross Cost	Welfare Dept. Cost	Non-Welfare Dept. Cost	Gross Cost
Orientation and appraisal	$103	$0	$103	$96	$0	$96
Formal assessment	6	0	6	11	0	11
Job search	865	0	865	559	0	559
Basic education	26	60	86	872	1,042	1,914
College	0	0	0	0	0	0
Vocational training	0	0	0	37	142	179
Work experience	0	0	0	0	0	0
Subtotal (operating costs)	1,000	60	1,060	1,575	1,184	2,759
Child care	59	0	59	157	0	157
Other support services	44	0	44	74	0	74
Total	**1,103**	**60**	**1,163**	**1,806**	**1,184**	**2,990**

SOURCES: For LFA: unpublished data from MDRC research. For HCD: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: These data are for the subsample without a high school diploma or GED certificate. Estimated costs are in 1993 dollars.

Table 4.2 reports costs borne by the welfare agencies and by other agencies and organizations separately. In general, the welfare department in Riverside financed the day-to-day operations of JOBS, including providing case management, conducting orientations and assessments, and operating job clubs, while basic education, vocational training, and college were financed mainly by other agencies and organizations such as community colleges, adult schools, and proprietary schools. For budgetary purposes, it is obviously important to distinguish between costs borne by welfare departments and costs borne by other agencies and organizations.

Table 4.2 clearly demonstrates how the focus on different service components affects costs. Riverside spent only $86 on basic education per referred case per month under the LFA approach, but under the HCD approach, which focuses on skills training, Riverside spent $1,914 on basic education per referred case. Overall, Riverside's LFA approach incurred costs that were well under half of its costs under the HCD approach. As will be seen, this difference in costs is ultimately attributable to differences under the two approaches in participation rates in various services and average lengths of time program participants received various services.

4.2.2 Unit Costs

Table 4.3 presents the unit costs of each service component of Riverside for both the LFA and the HCD approach. Unit costs incurred by the welfare department represent

Table 4.3

UNIT COSTS OF RIVERSIDE'S LABOR FORCE ATTACHMENT AND HUMAN CAPITAL DEVELOPMENT APPROACHES

	Labor Force Attachment (LFA)		Human Capital Development (HCD)	
	Welfare Dept. Unit Cost	Non-Welfare Dept. Unit Cost	Welfare Dept. Unit Cost	Non-Welfare Dept. Unit Cost
Activity	Per Participant Per Month	Per ADA[a]	Per Participant Per Month	Per ADA[a]
Orientation and appraisal[b]	$ 79	$ —	$ 79	$ —
Formal assessment[b]	535	—	535	—
Job search	682	—	682	—
Basic education	229	2,100	229	1,911
College	110	3,008	110	2,966
Vocational training	110	2,604	110	2,510
Work experience	514	—	514	—

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: These data are for the subsample without a high school diploma or GED certificate. Estimated costs are in 1993 dollars. Where data are not applicable, dashes are used.

a. One ADA refers to one unit of Average Daily Attendance, an attendance measure used by California community colleges and adult schools, and is defined as a block of 525 hours of attendance.

b. Cost per session for one participant.

the average cost per month of serving one case. Non-welfare department costs are displayed as the cost per average daily attendance (ADA), an attendance measure used by California community colleges and adult education schools. One unit of ADA is defined as a block of 525 hours of attendance. Thus, under the LFA model, it costs $2,100 to provide 525 hours of basic education to one person. Table 4.3 indicates that unit costs are very similar across the two approaches. This is due to the fact that both program approaches were run by the same welfare department and service providers. As will be seen next, the variation in cost is instead attributable to whether the program model calls for referring individuals to high-cost or low-cost activities and how long individuals stay in various program activities once they begin participating.

4.2.3 Participation Rates

Table 4.4 shows participation rates in program activities under both approaches in Riverside. The rates are based on all members of the JOBS research samples. The participation pattern reflects directly the philosophy behind the two approaches. Under the LFA approach, 55 percent of all referred cases participated in at least one day of job search. Under the HCD approach, in contrast, only 34 percent of the cases participated in at least one day of job search. The basic education service component was also subject to divergent participation patterns: 2 percent of the LFA program members participated in basic education compared with 55 percent of the HCD program members. Much of the difference in program costs can be attributed to such differences in participation

Table 4.4

PARTICIPATION RATES FOR EMPLOYMENT AND TRAINING ACTIVITIES IN RIVERSIDE WITHIN TWO YEARS AFTER ORIENTATION

	Of Those Referred to the Program, Percentage Who Ever Participated	
Activity	Labor Force Attachment (LFA)	Human Capital Development (HCD)
Job search	54.7%	33.6%
Basic education	2.1	54.8
Vocational training	0.0	4.3
Post-secondary education	0.0	0.0
Work experience	0.0	0.0
Ever participated in any activity	48.9	51.1

SOURCES: For LFA: unpublished data from MDRC research. For HCD: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: These data are for the subsample without a high school diploma or GED certificate. For the LFA full-sample results, see Table D.1.

rates. As indicated by Table 4.3, for example, the unit costs for job search were $682 for both the LFA and the HCD programs in Riverside. As reported in Table 4.2, however, the gross cost of job search was $865 per LFA case, but only $559 per HCD case.

4.2.4 Length of Stay in a Program Component

Like differences in participation rates, differences in average length of stay in various E&T activities also cause program costs to differ. Average length-of-stay figures for Riverside's LFA and HCD approaches are displayed in Table 4.5. These figures are averaged over only those individuals who actually participated in each of the indicated activities. For example, Table 4.5 indicates that persons who participated in job search for at least one day averaged about 2.3 months under the LFA approach and 2.4 months under the HCD approach.

Average lengths of stay in specific program components are driven by the program approach (LFA versus HCD), as well as by the nature of the activity. For example, once individuals begin basic education, they generally remain for several months. However, on average, participants under the HCD approach stayed approximately one and a half months longer than under the LFA approach.

Table 4.5

AVERAGE LENGTH OF STAY IN EMPLOYMENT AND TRAINING ACTIVITIES IN RIVERSIDE WITHIN TWO YEARS AFTER ORIENTATION

	Average Number of Months of Participation	
Activity	Labor Force Attachment (LFA)	Human Capital Development (HCD)
Job search	2.3	2.4
Basic education	5.4	7.0
Vocational training	0.0	7.8
Post-secondary education	0.0	0.0
Work experience	0.0	0.0

SOURCES: Unpublished data from the National Evaluation of Welfare-to-Work Strategies based on MDRC calculations from the two-year survey, adjusted using MDRC-collected case file data from the programs.

NOTES: These data are for the subsample without a high school diploma or GED certificate. For the LFA full-sample results, see Table C.1.

4.2.5 Support Services

The cost estimates presented so far do not include costs for child care, transportation, or other ancillary services, all of which must be included in a comprehensive cost analysis. Table 4.6 shows unit costs, the average length of service usage, costs per individual who received support services, the percentage of cases that received services, and gross costs per case. The figures are shown for both approaches and for all three sites.

Table 4.6

SUPPORT SERVICE COSTS OF WELFARE-TO-WORK-RELATED ACTIVITIES WITHIN TWO YEARS AFTER ORIENTATION

Site and Service	Average Monthly Payment	Average Months of Payments	Cost per Referred Case Who Received Service	Percentage of Referred Cases Who Received Service	Gross Cost per Referred Case
Atlanta					
Labor Force Attachment					
Child care	$225	9	$2,254	31%	$709
Transportation	38	3	126	53	67
Ancillary services	36	3	113	94	106
Total					**882**
Human Capital Development					
Child care	$247	9	$2,230	29%	$648
Transportation	44	7	325	51	165
Ancillary services	42	5	217	95	206
Total					**1,020**
Grand Rapids					
Labor Force Attachment	$214	7	$1,415	19%	$270
Child care	n/a	n/a	n/a	n/a	26
Transportation	n/a	n/a	n/a	n/a	1
Ancillary services					**297**
Total					
Human Capital Development					
Child care	$218	7	$1,551	25%	$383
Transportation	n/a	n/a	n/a	n/a	32
Ancillary services	n/a	n/a	n/a	n/a	2
Total					**416**
Riverside (full sample)[a]					
Labor Force Attachment					
Child care	$143	3	$435	17%	$ 73
Transportation	24	3	65	54	35
Ancillary services	72	1	105	13	14
Total					**122**
Riverside (subsample without a high school diploma or GED)					
Labor Force Attachment					
Child care	$134	3	$341	17%	$ 59
Transportation	21	3	57	56	32
Ancillary services	65	2	95	13	12
Total					**103**
Human Capital Development					
Child care	$143	5	$648	24%	$157
Transportation	23	5	106	60	63
Ancillary services	22	2	36	28	10
Total					**231**

SOURCES: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997. For Riverside LFA (subsample without a high school diploma or GED certificate): unpublished data from MDRC research.

NOTES: Estimated costs are in 1993 dollars.

Where data are not applicable, n/a is used.

Rounding may cause slight discrepancies in calculating sums.

a. For Riverside HCD, full-sample data are not available.

For purposes of discussion, the focus here is on child care costs under the LFA approach. Table 4.6 indicates that unit costs for child care ranged from $134 to $247 across the three sites. Gross costs per case, however, had much more variation, ranging from a low of $59 in Riverside (sample without high school diploma or GED certificate) to $709 in Atlanta. Much of this disparity can be explained by differences in the length of service receipt and in participation rates, very much the same factors that cause variation in the costs of program activities. For example, among those referred to the LFA program who received any child care support, the average number of months of receipt was nine in Atlanta but only three in Riverside. While this helps explain Atlanta's high and Riverside's low child care costs, it is only part of the story. The percentage of cases that received child care services affects gross costs as well. The percentage of cases that received child care payments ranged from 17 percent in Riverside to 31 percent in Atlanta.

The lesson here is that decisions on program design have a very direct influence on support service costs. Localities can choose along a continuum that ranges from the provision of very generous to very basic support services. Such decisions strongly affect the gross costs of a program.

4.2.6 Site-Specific Factors

Various factors that are specific to a site running an E&T program can have major effects on the costs of the program. These site-specific factors include the manner in which the local agency operating the program implements its program model, welfare grant levels at the site, the demographic characteristics of the population served by the program at the site, and the characteristics of the local labor market.

a. Agency Discretion. Besides making decisions on the overall philosophy of a program and basic service offerings, program agencies must decide on specific program practices. These decisions affect program costs. For example, Riverside's unit cost for job search exceeded that at the other two sites under both the LFA and HCD approaches, in part because, to a greater extent than the other two sites, Riverside used job developers on staff, who canvassed the local job market for employment opportunities for participants. Similarly, Riverside's unit cost for basic education was relatively high because it made payments to basic education providers to supply the welfare department with detailed attendance information on JOBS students, that they were not otherwise funded to collect and report.

Included among the agency decisions that may affect program costs are staff management practices, procedures for monitoring and sanctioning clients' participation behavior, and guidelines for providing support services. For example, it is apparent that providing extensive staff training, supervising case managers closely to ensure that they counsel clients effectively, and focusing great effort on completing administrative tasks all increase program costs, although there may be good reasons for all these efforts.

b. Client Characteristics. The population an E&T program serves affects the average length of stay in the program. For example, the welfare population can be catego-

rized into two groups: short-term recipients, who have received public assistance for less than two years, and long-term recipients, who have been on the rolls for two years or more. Individuals in the former group usually have acquired a more substantial work history and, hence, even in the absence of E&T programs are more likely to have skills that enable them to find jobs. Long-term welfare recipients, in contrast, often lack the basic skills required in the labor market. Therefore, individuals who have a short welfare history will, on average, be ready to leave an E&T program earlier than long-term recipients, who have higher hurdles to surmount. Obviously, a person who participates a shorter time in a program needs fewer resources and incurs fewer costs than a person who remains longer.

Table 4.7 presents the percentage distribution of cases covered by the JOBS mandate at the three JOBS evaluation sites. While 78 percent of cases covered by the JOBS mandate in Atlanta were long-term welfare recipients, only 54 percent in Riverside were. This is probably one reason why Riverside had lower gross costs under both the LFA and HCD approaches than Atlanta.

Table 4.7

WELFARE STATUS OF AFDC RECIPIENTS AT THE BEGINNING OF THE PROGRAM

Welfare Status	Atlanta	Grand Rapids	Riverside
On welfare less than two years	21.6%	36.5%	45.9%
On welfare two years or more (cumulatively)	78.4	63.5	54.1
Total	100	100	100

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

c. Welfare Grant Levels. The JOBS evaluation found that state welfare grant levels affect E&T program impacts and costs. Specifically, in high-grant-level states that make relatively generous welfare payments, the incentive for welfare recipients to seek work is diminished. Thus, under otherwise similar circumstances, it can be assumed that welfare recipients in low-grant states get off the welfare rolls and, hence, leave E&T programs operated by welfare agencies sooner than recipients in high-grant states. This, in turn, should lower program costs.

d. Labor Market Conditions. An E&T program that operates in a strong labor market is likely to find it easier to place program participants into jobs than a similar program in a weak labor market. In addition, a strong labor market might also contribute to the faster advancement of new hires and to increases in job retention, thereby keeping individuals out of E&T programs in the first place. By affecting the time in an E&T program, such labor market factors may influence the program costs.

4.3 Estimating the Costs of an Ongoing Program: An Illustration

In chapter 3, a seven-step procedure for estimating the gross costs of an ongoing program was developed. This section uses the information provided in some of the tables presented earlier in this chapter to demonstrate how those seven steps can be applied in practice. More specifically, an illustration is provided here of how the seven steps can be used to replicate gross cost estimates for the Riverside LFA program. For simplicity, non-program costs are ignored in doing this. As indicated in Tables 4.2 and 4.6, respectively, the gross costs of program activities were estimated to be $1,060 and the gross costs of program support services were estimated to be $103 for Riverside's LFA program. Thus, including support services costs, total gross costs were $1,163. In Table 4.8, the seven steps are used to derive this estimate.

By using the disk accompanying the guide, you can obtain estimates for your own program using a format similar to that used in the table.

Table 4.8

ESTIMATING THE COSTS OF AN ONGOING PROGRAM
Two-Year Costs of Riverside's Labor Force Attachment Approach

Step 1 List Program Components	Step 2 Unit Cost Estimates of Program Components	Step 3 Select the Analysis Sample for Steps 4 and 5 [a] — Step 4 Participation Rate [b]	Step 3 — Step 5 Average Length of Stay [c]	Step 6 Gross Cost per Referred Case per Program Component	Step 7 Total Gross Cost per Referred Case
PROGRAM ACTIVITIES					
Orientation and appraisal					
Welfare department	$ 79	1.30 [d]	1 session	$ 103	
Non-welfare department	$ 0	1.30	1 session	$ 0	
Formal assessment					
Welfare department	$ 535	0.01	1 session	$ 6	
Non-welfare department	$ 0	0.01	1 session	$ 0	
Job search					
Welfare department	$ 682	0.55	2.3 months	$ 863	
Non-welfare department	$ 0	0.55	2.3 months	$ 0	
Basic education					
Welfare department	$ 229	0.02	5.4 months	$ 26	
Non-welfare department	$ 528 [e]	0.02	5.4 months	$ 60	
College					
Welfare department	$ 110	0.00	0 months	$ 0	
Non-welfare department	$ 500 [f]	0.00	0 months	$ 0	
Work experience					
Welfare department	$ 514	0.00	0 months	$ 0	
Non-welfare department	$ 0	0.00	0 months	$ 0	
SUPPORT SERVICES					
Child care					
Welfare department	$ 134	0.17	2.5 months	$ 59	
Non-welfare department	$ 0	0.17	2.5 months	$ 0	
Transportation					
Welfare department	$ 21	0.56	2.6 months	$ 32	
Non-welfare department	$ 0	0.56	2.6 months	$ 0	
Ancillary services					
Welfare department	$ 65	0.13	1.5 months	$ 12	
Non-welfare department	$ 0	0.13	1.5 months	$ 0	
Total gross cost per referred case					$ 1,163

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997. For support services: unpublished data from MDRC research.

NOTES: These data are for the subsample without a high school diploma or GED certificate.

Rounding may cause slight discrepancies when calculating sums.

a. The data on participation rates (step 4) and average length of participation (step 5) were obtained from a sample of 193 cases that were assigned to Riverside's LFA program.

b. The percentage of the analysis sample participating in each activity and receiving each service within two years of attending orientation.

c. Average months participating in each program activity and receiving each support service per participant within two years of attending orientation. Estimates are based on only those who participated in the activity or received the service.

d. On average, 1.3 sessions were attended.

e. $4 per hour for 132.0 hours of basic education.

f. $5.73 per hour for 87.3 hours of college.

Chapter 5

Predicting Costs of Programs That Have Not Yet Been Implemented

This chapter outlines the procedures necessary to predict the annual costs of an employment and training program that has not yet been implemented. As discussed in chapter 1, it is important to cost out programs prior to implementation for purposes of budgeting and resource planning and, if necessary, to modify various program provisions to make sure that program costs do not exceed the available budget.

The chapter is divided into five major sections. Section 5.1 outlines the nine steps required to predict the *gross* costs of a not-yet-implemented program during the first year of program operations. Section 5.2 illustrates how these steps can be applied in practice by demonstrating their use in costing out a simple hypothetical E&T program. As will be seen, a number of the steps require values that are difficult to obtain in practice. Section 5.3 describes how these values might be obtained, emphasizing particularly the possible use of information from cost analyses of previously implemented programs. Section 5.4 discusses the reasons why such estimates are unlikely to hold for subsequent years and provides some sense of how costs are likely to change over time. The chapter's final section depicts techniques that can be used to accomplish the task of obtaining estimates of the *net* costs of a not-yet-implemented E&T program. Sections 5.1, 5.2, and 5.4 should be of interest to users of findings from cost analyses, while sections 5.3 and 5.5 are intended mainly for those responsible for costing out not-yet-implemented E&T programs.

The accompanying disk includes a template for use in costing out not-yet-implemented programs. The spreadsheet is modeled after the steps developed in this chapter.

In contrast to chapter 3, which described procedures for estimating the costs of ongoing E&T programs, regardless of whether they are voluntary or mandatory, this chapter focuses specifically on techniques for conducting cost analyses of mandatory E&T programs operated by welfare agencies, so-called welfare-to-work programs. The approach needed to conduct cost analyses of voluntary E&T programs would differ in significant respects from conducting cost analyses of mandatory programs like the one considered here.

5.1 Steps in Estimating the Gross Costs of Not-Yet-Implemented Programs

This section provides a brief overview of the steps in conducting a cost analysis of an ongoing program that are required for predicting the gross costs of a not-yet-implemented E&T program during its first year of operation. The following two sections provide much greater detail about these steps, indicating how they can be used in practice.

The required calculations can be readily made by using the disk provided with the guide. Although the steps presented here differ considerably from those required to estimate the gross cost of an ongoing program, there are similarities. One important source of the differences is that in conducting cost analyses of ongoing programs, the number of people who participate in each program activity is known, but in cost analyses of not-yet-implemented programs, flows of individuals from one program activity to another must be predicted.

Step 1. Develop A Flow Diagram

Develop a detailed flow diagram of the proposed program — that is, a diagram that displays the expected flow of cases into each of the activities and support services to be provided by the proposed program. (See Figure 4.1 or Figure 5.1 for an illustration.)

Step 2. Predict Total Program Referrals

Predict the total number of cases that will be referred to the program during the first 12 months after it is implemented. Program costs will be estimated for these cases and for this time frame.

Step 3. Predict the Assignment Rates for Each Program Component

Of those cases referred to the program (see step 2), predict the fraction that will be assigned during the program's first year to each of the program activities that appear in the flow diagram developed in step 1. In addition, predict the fraction of those referred to the program who will receive each program support service during the first year of program operations. These fractions must be predicted separately for each program activity and support service. If some cases will be assigned to certain program activities or support services more than once during the 12-month period, they should be counted in the numerator of the assignment rate once for each time they are assigned. However, cases that will not be assigned to a particular program activity until *after* the first year of program operations should *not* be counted in the numerator. Note that it is likely that all cases referred to the program will be assigned at least once to activities related to the program enrollment process, such as orientation and assessment.

e.g.

If all the cases referred to the program will be assigned to job search at least once during the program's first year, and one-fifth will be assigned to job search a second time during the year, then the job search assignment rate would equal 1.2.

Step 4. Predict the Participation Rate for Each Program Component

Of those cases that will be assigned to each of the program activities, predict the fraction that will actually participate in the activity. For each program support service, assign a value of 1.

Step 5. Predict the Average Length of Participation

Predict the average length of time that cases participating in each program activity will remain in the activity (for example, average months of basic education and average weeks of participation in job clubs). For cases that receive each support service, predict the average length of time they will receive the service. For activities that do not really have a time dimension (such as attending orientation or completing a formal assessment), simply use a value of 1. Note that some cases referred to the program during its first year will almost surely continue to participate in certain program activities (for example, college) or continue to receive certain support services (for example, child care) beyond the program's first year. Nonetheless, the length-of-participation averages should be based on length of stay during *only* the first year of program operations.

Step 6. Estimate Unit Costs

Using time units that are consistent with those used in step 5, estimate the unit cost of each program component (for example, cost per orientation session, cost of serving one person in basic education for one month, cost of serving one person for one week in a job club, and cost of providing one month of child care). If the costs of providing a particular service component are shared by two organizations — say, a welfare agency and a community college — it is important for budgeting purposes that the unit cost incurred by each agency be computed separately.

e.g.

For instance, a welfare agency's unit cost for vocational training would usually include any costs incurred in requiring those assigned to vocational training to attend class; the community college's unit cost estimate would not incorporate those enforcement costs.

Step 7. Compute Costs per Referred Case for Each Program Activity and Support Service

For each program activity and support service, the costs per referred case can be predicted by computing the product of the values obtained in the previous steps.

Specifically, make the following computation for each program activity and support service:

step 3 x step 4 x step 5 x step 6

Note that by making these computations, costs are averaged across all the cases that will be referred to the program, regardless of whether or not they will participate in the program activity or receive the support service. In effect, in computing the average cost for a given program component, those cases that will not participate in the component are assigned a zero cost value for that component. Only by doing this is it appropriate to sum the average cost values obtained in this step.

Step 8. Compute Total Costs per Referred Case

To obtain a prediction of total program costs per referred case, sum all the average cost values obtained in step 7.

Step 9. Compute Aggregate Program Costs

To obtain a prediction of aggregate program costs, multiply the value obtained in step 2 by the value obtained in step 8.

The sequence actually followed in completing steps 2–6 can vary from the order in which they are presented here. For example, in designing an E&T program, it may be helpful to first determine the unit costs of various program activities (step 6) or at least some of the determinants of unit cost, such as the number of seats in a particular vocational training classroom. This information can then be used to make decisions about assignment rates for each program component and the length of time participants will be allowed to remain in various program activities. Steps 7–9, however, each depend on information from the steps preceding them and, therefore, must be completed in the order indicted.

5.2 Estimating the Costs of a Not-Yet-Implemented Program: An Illustration

This section guides you through using the steps described above to predict the gross cost of a mandatory not-yet-implemented welfare-to-work program for TANF recipients during its first year of operation. The program used here is a very simple, hypothetical one. It assumes, for example, that no one participates in any program activity more than once during the program's first year of operation and that there are no nonprogram costs. Once you understand the steps, you will be able to apply them easily to more complex program designs.

Although the values for unit cost and participation that are used in costing out this simple hypothetical program are rooted in the JOBS evaluation described in chapter 4,

these values are not for any real program. Section 5.3 describes how the values needed to cost out an actual program might be obtained.

For illustrative purposes, the hypothetical program is costed out twice. Example 1 (Tables 5.1–5.4) works through each of the steps required to obtain cost estimates of the program as initially designed. In example 2 (Tables 5.5–5.8), a key element of the program design is changed to show how that would affect program costs. Examples 1 and 2 can be easily replicated by using the spreadsheet provided on the accompanying disk.

Example 1. Costs of the Program as Initially Designed

Figure 5.1 presents a flow diagram for a hypothetical welfare-to-work program (step 1). In this simple program, all TANF recipients who are referred to the program are required to go through an initial orientation and assessment process. Based on the results, they are then assigned to one of the following four program activities: job club, basic education, vocational training, or unpaid work experience. In addition to program activities, it is assumed that the program provides child care, but no other type of support services.

Tables 5.1–5.4 provide a detailed breakdown of the calculations required to work through steps 1–9, using hypothetical numbers for purposes of the example.

Example 2. Testing for Sensitivity

In costing out a not-yet-implemented E&T program, the computations required by steps 7–9 can easily be performed using a spreadsheet. Such a spreadsheet is provided in the disk that accompanies this guide. The major advantage of a spreadsheet is that it allows you to readily change the values obtained from steps 2–6 and to see how doing so changes the estimate of total program costs. This could be valuable for two reasons. First, a welfare agency has considerable discretion over the number of cases that are referred to an E&T program (step 2) and the various program activities to which these cases are assigned and the support services they receive (step 3). It is useful to determine how different decisions concerning these issues affect program costs. For example, if your annual budget is less than the total cost obtained in step 9, you might want to see how this cost estimate is affected by policy decisions that differ from the ones on which the estimate was based. Second, as discussed in section 5.3, considerable uncertainty will inevitably surround the values for participation rates (step 4), average length of time in program activities (step 5), and unit costs (step 6) that are used in costing out a not-yet-implemented program. Thus, rather than selecting a single value, it may be better to determine a reasonable range, and then see how sensitive the cost estimates are to using alternative values within this range.

To demonstrate the usefulness of testing the sensitivity of cost estimates to changes in the values used to obtain the estimates, this section examines a simple example in which everything is held constant except the program assignment rate. Tables 5.5–5.8 provide a detailed breakdown of the calculations required for the nine cost-estimating steps, as done for example 1. This second example, however, shows how sensitive the cost estimates for the hypothetical E&T program are to assigning 80 percent, rather than just 40 percent, of the cases referred to the program to job clubs and, as a result, assigning fewer cases to other program activities. The sensitivity of total program costs to changes in the assignment rates is demonstrated by comparing costs under these two alternative

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Figure 5.1

FLOW DIAGRAM FOR A HYPOTHETICAL WELFARE-TO-WORK PROGRAM

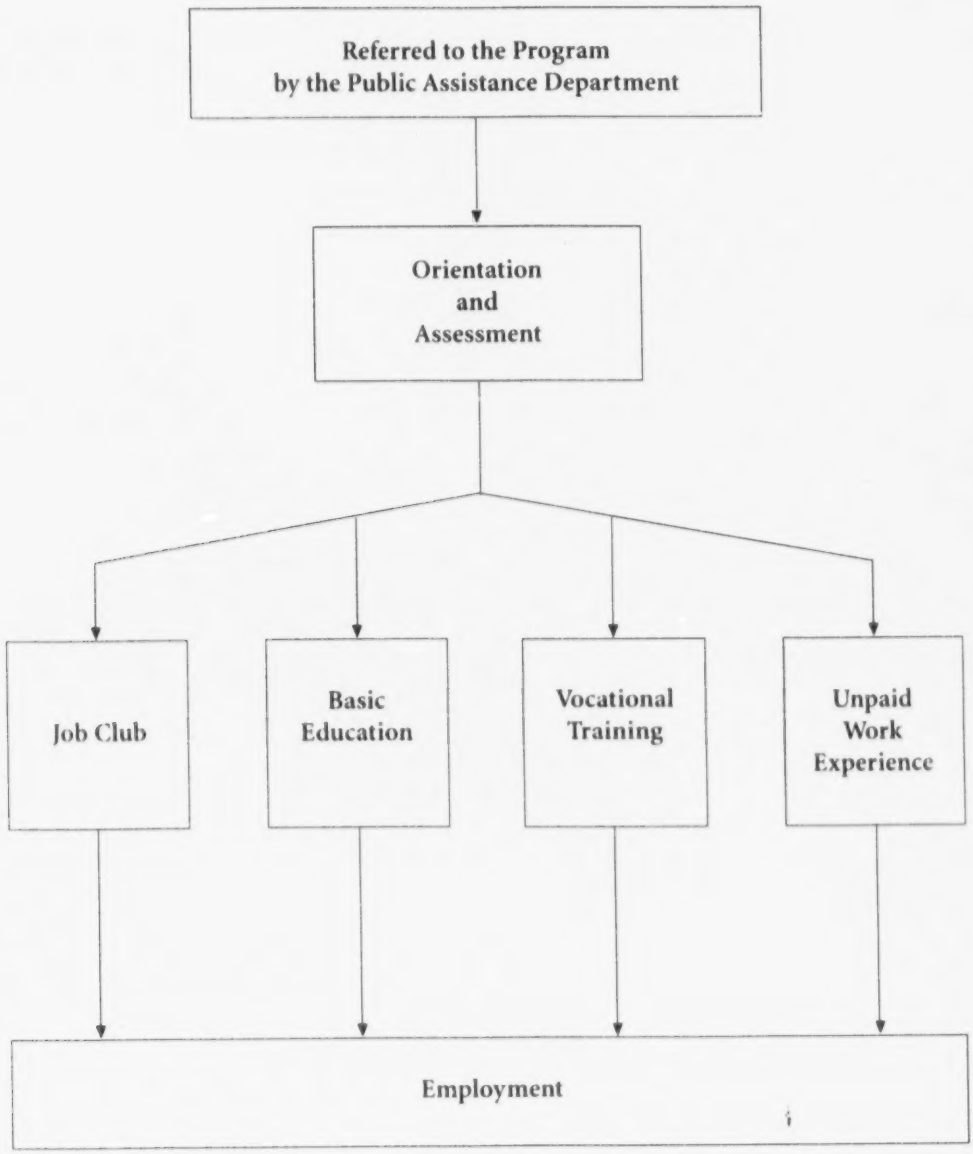

Table 5.1

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM: HYPOTHETICAL EXAMPLE 1
Steps 1-5

Step 1	Step 2	Step 3		Step 4		Step 5
List Program Components	Number of Cases Referred to the Program	3A Number of Cases Assigned to Each Program Component	3B Assignment Rate	4A Number of Cases Participating in Each Program Component	4B Participation Rate	Average Length of Stay
PROGRAM ACTIVITIES						
Orientation	10,000	10,000	1.00	10,000	1.00	1 session
Assessment	10,000	10,000	1.00	10,000	1.00	1 session
Job club	10,000	4,000	0.40	3,000	0.75	1 month
Basic education	10,000	2,000	0.20	1,500	0.75	10 months
Vocational training	10,000	1,000	0.10	800	0.80	10 months
Unpaid work experience	10,000	3,000	0.30	1,800	0.60	3 months
SUPPORT SERVICE						
Child care	10,000	4,000	0.40	4,000	1.00	8 months

NOTES: *Explanation of Step 3:* Assignments to various program components are expressed as rates. Thus, the number of cases assigned to a component is divided by the total number of cases referred to the program. The information is needed in this form for later steps. For purposes of the illustration, assume that all 10,000 cases will be referred to the E&T program orientation and assessment sessions. Thus, the assignment rate for each of these program activities is 1.0. It is also assumed that after the orientation and assessment sessions, it will be decided that 4,000 of the 10,000 referrals will be channeled into job clubs, 2,000 into basic education, 1,000 into vocational training, and 3,000 into work experience. Thus, it is assumed for simplicity's sake that no cases will be unassigned during the year. Finally, it is assumed that 4,000 cases will receive child care.

Explanation of Step 4: The level of participation in various program activities is expressed as a rate. This is necessary for later steps. Thus, the participation rate is determined by dividing the number of cases predicted to participate in each program activity by the number of cases assigned to the activity. This example assumes that all 10,000 cases referred to the program and assigned to orientation and assessment will actually participate in these activities. Thus, the participation rate for these activities is 1.0. However, although 4,000 cases will be assigned to job clubs, it is assumed that only 3,000 will actually participate in this activity. Similarly, not all the cases that will be assigned to basic education, vocational training, and work experience are assumed to participate. Those cases that will be assigned to a particular program activity but will not participate might find employment prior to receiving the service, be out of compliance with program requirements, or have other reasons for not participating.

Explanation of Step 5: This example assumes that it takes one month, on average, to complete a job club assignment; that cases participating in basic education or vocational education during the program's first year will remain in these activities for 10 months, on average, during the year; and that those participating in unpaid work experience will remain in this activity 3 months, on average, during the year. It is further assumed that cases receiving child care during the program's first year will receive it for 8 months, on average.

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Table 5.2

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM
HYPOTHETICAL EXAMPLE 1
Step 6
Unit Cost

	Welfare Department Cost			Non-Welfare Department Cost			
	Personnel	Overhead	Subtotal	Personnel	Overhead	Subtotal	Total
PROGRAM ACTIVITIES							
Orientation	$ 60	$ 20	$ 80	$ 0	$ 0	$ 0	$ 80
Assessment	$240	$ 80	$320	$ 0	$ 0	$ 0	$320
Job club	$450	$150	$600	$ 0	$ 0	$ 0	$600
Basic education	$112	$ 38	$150	$263	$ 87	$350	$500
Vocational training	$ 97	$ 33	$130	$450	$150	$600	$730
Unpaid work experience	$187	$ 63	$250	$ 0	$0	$ 0	$250
SUPPORT SERVICE							
Child care	$120	$ 40	$160	$ 0	$ 0	$ 0	$160

NOTE: *Explanation of Step 6:* All unit costs for the hypothetical program, except for orientation and assessment, are expressed as costs per month per participant in the indicated activity. Unit costs for orientation and assessment are on a per session basis. The example assumes that 75 percent of subtotal cost is accounted for by staff personnel costs; 25 percent is accounted for by overhead costs. It is also assumed that the job clubs are run entirely by the welfare agency and that child care is paid for entirely by the welfare agency. Therefore, other agencies or institutions incur no costs. Non-welfare agency costs are also assumed to be zero for unpaid work experience because these agencies and institutions receive labor free of charge.

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Table 5.3

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM: HYPOTHETICAL EXAMPLE 1
Steps 7 and 8
Cost per Referred Case for Each Program Activity and Support Service

List Program Components	Assignment Rate (Step 3)	Participation Rate x (Step 4)	Average Length of Stay x (Step 5)	Unit Cost x (Step 6)	Step 7 Average Component Cost =	Step 8 Total Gross Cost per Referred Case
PROGRAM ACTIVITIES						
Orientation						
Welfare department	1.00	1.00	1 session	$ 80	$ 80	
Non-welfare department	1.00	1.00	1 session	$ 0	$ 0	
Assessment						
Welfare department	1.00	1.00	1 session	$ 320	$ 320	
Non-welfare department	1.00	1.00	1 session	$ 0	$ 0	
Job club						
Welfare department	0.40	0.75	1 month	$ 600	$ 180	
Non-welfare department	0.40	0.75	1 month	$ 0	$ 0	
Basic education						
Welfare department	0.20	0.75	10 months	$ 150	$ 225	
Non-welfare department	0.20	0.75	10 months	$ 350	$ 525	
Vocational training						
Welfare department	0.10	0.80	10 months	$ 130	$ 104	
Non-welfare department	0.10	0.80	10 months	$ 600	$ 480	
Unpaid work experience						
Welfare department	0.30	0.60	3 months	$ 250	$ 135	
Non-welfare department	0.30	0.60	3 months	$ 0	$ 0	
SUPPORT SERVICE						
Child care						
Welfare department	0.40	1.00	8 months	$ 160	$ 512	
Non-welfare department	0.40	1.00	8 months	$ 0	$ 0	
TOTAL						
Subtotal						
Welfare department					$1,556	
Non-welfare department					$1,005	
Total gross cost per referred case					$2,561	

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Table 5.4

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM
HYPOTHETICAL EXAMPLE 1
Step 9
Aggregate Costs

	Total Cost (Step 8)	x	Number of Cases Referred to the Program (Step 2)	=	Step 9 Aggregate Costs
AGGREGATE WELFARE DEPARTMENT COSTS					
	$1,556	x	10,000	=	**$15.56** million
AGGREGATE NON-WELFARE DEPARTMENT COSTS					
	$1,005	x	10,000	=	**$10.05** million
AGGREGATE TOTAL PROGRAM COSTS					
	$2,561	x	10,000	=	**$25.61** million

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Table 5.5

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM: HYPOTHETICAL EXAMPLE 2
Steps 1-5

Step 1	Step 2	Step 3		Step 4		Step 5
List Program Components	Number of Cases Referred to the Program	3A Number of Cases Assigned to Each Program Component	3B Assignment Rate	4A Number of Cases Participating in Each Program Component	4B Participation Rate	Average Length of Stay
PROGRAM ACTIVITIES						
Orientation	10,000	10,000	1.00	10,000	1.00	1 session
Assessment	10,000	10,000	1.00	10,000	1.00	1 session
Job club	10,000	8,000	0.80	6,000	0.75	1 month
Basic education	10,000	500	0.05	375	0.75	10 months
Vocational training	10,000	500	0.05	400	0.80	10 months
Unpaid work experience	10,000	1,000	0.10	600	0.60	3 months
SUPPORT SERVICE						
Child care	10,000	4,000	0.40	4,000	1.00	8 months

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Table 5.6

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM
HYPOTHETICAL EXAMPLE 2
Step 6
Unit Cost

	Welfare Department Cost			Non-Welfare Department Cost			
	Personnel	Overhead	Subtotal	Personnel	Overhead	Subtotal	Total
PROGRAM ACTIVITIES							
Orientation	$ 60	$ 20	$ 80	$ 0	$ 0	$ 0	$ 80
Assessment	$240	$ 80	$320	$ 0	$ 0	$ 0	$320
Job club	$450	$150	$600	$ 0	$ 0	$ 0	$600
Basic education	$112	$ 38	$150	$263	$ 87	$350	$500
Vocational training	$ 97	$ 33	$130	$450	$150	$600	$730
Unpaid work experience	$187	$ 63	$250	$ 0	$ 0	$ 0	$250
SUPPORT SERVICES							
Child care	$120	$ 40	$160	$ 0	$ 0	$ 0	$160

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Table 5.7

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM
HYPOTHETICAL EXAMPLE 2
Steps 7 and 8
Cost per Referred Case for Each Program Activity and Support Service

List Program Components	Assignment Rate (Step 3)	x	Participation Rate (Step 4)	x	Average Length of Stay (Step 5)	x	Unit Cost (Step 6)	=	Step 7: Average Component Cost	Step 8: Total Gross Cost per Referred Case
PROGRAM ACTIVITIES										
Orientation										
Welfare department	1.00		1.00		1 session		$ 80		$ 80	
Non-welfare department	1.00		1.00		1 session		$ 0		$ 0	
Assessment										
Welfare department	1.00		1.00		1 session		$320		$ 320	
Non-welfare department	1.00		1.00		1 session		$ 0		$ 0	
Job club										
Welfare department	0.80		0.75		1 month		$600		$ 360	
Non-welfare department	0.80		0.75		1 month		$ 0		$ 0	
Basic education										
Welfare department	0.05		0.75		10 months		$150		$ 56	
Non-welfare department	0.05		0.75		10 months		$350		$ 131	
Vocational training										
Welfare department	0.05		0.80		10 months		$130		$ 52	
Non-welfare department	0.05		0.80		10 months		$600		$ 240	
Unpaid work experience										
Welfare department	0.10		0.60		3 months		$250		$ 45	
Non-welfare department	0.10		0.60		3 months		$ 0		$ 0	
SUPPORT SERVICE										
Child care										
Welfare department	0.40		1.00		8 months		$160		$ 512	
Non-welfare department	0.40		1.00		8 months		$ 0		$ 0	
TOTAL										
Subtotal										
Welfare department									$1,425	
Non-welfare department									$ 371	
Total gross cost per referred case									$1,796	

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Table 5.8

ESTIMATING THE COSTS OF A NOT-YET-IMPLEMENTED PROGRAM
HYPOTHETICAL EXAMPLE 2
Step 9
Aggregate Costs

	Total Cost (Step 8)		Number of Cases Referred to the Program (Step 2)		Step 9 Aggregate Costs
AGGREGATE WELFARE DEPARTMENT COSTS					
	$1,425	x	10,000	=	**$14.25** million
AGGREGATE NON-WELFARE DEPARTMENT COSTS					
	$ 371	x	10,000	=	**$ 3.71** million
AGGREGATE TOTAL PROGRAM COSTS					
	$1,796	x	10,000	=	**$17.96** million

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assignment rates. The steps that are affected by this change in assignment rates are shown in Table 5.9. Examples 1 and 2 assume that 10,000 cases are assigned to the program.

The change in the assignment rates for different program activities causes the prediction of aggregate gross costs to fall from $25.6 million to $17.9 million. The reason for this reduction is that the number of cases assigned to job clubs, which are relatively inexpensive due to their short duration, was doubled, while far fewer cases were assigned to more expensive program activities such as basic education, vocational training, and unpaid work experience. The effect of this change in assignment rates is indicated in Table 5.9.

Table 5.9

EFFECT OF A CHANGE IN ASSIGNMENT RATES ON THE PREDICTED COSTS PER CASE REFERRED TO THE PROGRAM

	Assignment Rate (Step 3)		Costs per Referred Case (Step 7)	
Program Component	Example 1	Example 2	Example 1	Example 2
Orientation	1.0	1.00	$ 80	$ 80
Assessment	1.0	1.00	320	320
Job club	0.4	0.80	180	360
Basic education	0.2	0.05	750	187
Vocational training	0.1	0.05	584	292
Unpaid work experience	0.3	0.10	135	45
Child care	0.4	0.40	512	512
Total Gross Cost	—	—	$2,561	$1,796

5.3 Obtaining the Values Needed to Cost Out an Employment and Training Program

This section discusses how the values required by steps 2–6 can be obtained in practice. The values needed to cost out a not-yet-implemented program are predictions, so they can never be entirely accurate. However, greater accuracy is possible with more time and resources. The appendices at the end of this guide contain values from MDRC studies of various welfare-to-work programs. The quickest way to cost out a not-yet-implemented E&T program is simply to choose from among these values. (This section provides some guidance for doing that.) However, because the values provided in Appendices B–F are for programs that will differ from the one you are costing out, none is likely to fit your

needs perfectly. Consequently, these values should be adjusted in various ways that are described in this section. Furthermore, it is usually better to obtain your own values, ones that pertain directly to the program you are costing out. The extent to which you are able to adjust values obtained from other E&T programs or obtain values for your own program, however, will depend on the time and resources that you have available.

5.3.1 Predicting the Total Number of Cases Referred (Step 2)

The number of cases referred to an E&T program during a year is mainly a policy decision. This decision, however, obviously has major budgetary implications, as decreasing the number of cases referred is a direct way of decreasing program costs.

In practice, the number of cases referred to a mandatory E&T program will be strongly influenced by the program's eligibility criteria. Perhaps there is a minimum age requirement for all the children in the case, or a specified number of months on the welfare rolls. Thus, to predict the number of cases that will be assigned to a program during the year after its adoption, it is useful to determine the proportion of cases currently on the rolls that meet the program's eligibility criteria. If the program has eligibility criteria that are tied to the length of time on the welfare rolls, it is also useful to determine the proportion of cases that will become eligible during the next 12 months. In making the latter determination, it is necessary to account for the rate at which cases leave the welfare rolls. (See the discussion in section 5.3.2, below.)

Determining the proportion of cases that meet program eligibility criteria is most readily accomplished if there is an automated data file on the current caseload that contains the information required for making a determination for each case. If such a data file does not exist, a determination can be made from the hard-copy case files of a randomly selected sample of current cases.

5.3.2 Predicting Assignment Rates (Step 3)

Appendix B provides information on assignment rates at three JOBS program sites. However, these assignment rates are likely to differ greatly from those for your program. Like the number of cases referred to a mandatory E&T program, assignment rates for various program activities and support services are strongly influenced by policy decisions concerning the program design and rules. For example, cases may be assigned to a prescribed sequence of activities, which ends either after a job is obtained or a time limit is reached. Similarly, whether a case receives certain support services will be determined by program rules and will depend on the particular activity in which the person is participating and certain case characteristics; the receipt of child care, for example, may depend on the number and ages of children in the case. Depending in part on available financing, there may be periods when a person who is referred to the program will not be assigned to any activity. Depending on program rules, this may also occur when a person is faced with certain circumstances — for example, an illness or a transportation problem.

Because assignment rates are computed by dividing the number of cases assigned to an activity by the total number of cases referred to the program, they are affected not only by policy decisions reflected in the program design and rules, but also by the num-

ber of referred cases available for assignment. The number of cases available for assignment must first be predicted, therefore, to determine assignment rates. Decisions concerning the program rules and design should help guide the effort to predict assignment rates.

e.g.

The program rules may stipulate that only cases with particular characteristics qualify to participate in certain program activities or receive certain support services. If so, information from welfare agency automated data files or a sample of hard-copy case files should be used to determine the fraction of referred cases that will meet these criteria. Similarly, the program design may specify that math and literacy tests or other such devices will be used to determine the program activities to which individuals will be assigned. Individuals with low scores may be assigned to basic education and those with high scores to job search. In such instances, if sufficient time is available, information useful in predicting assignment rates can be obtained by administering the tests to a small representative sample of program-eligible individuals at the time the effort to cost out the program is made.

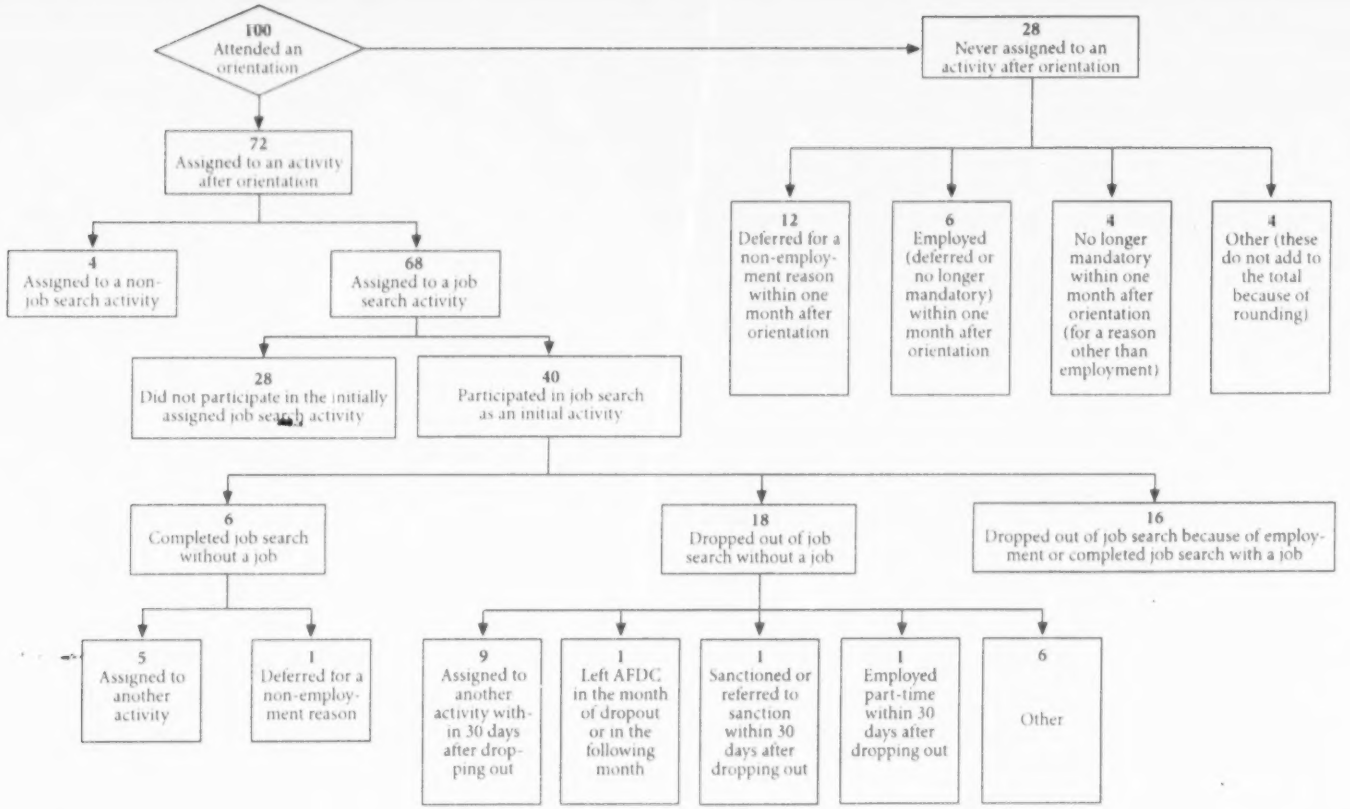
The difficulty in predicting the number of cases available for assignment to a particular program activity depends largely on where in the program sequence assignment to the activity occurs. Presumably, virtually all the cases referred to the program will be available for assignment to enrollment activities such as orientation and assessment. Some cases, however, will fail to complete the enrollment process (they may, for example, find a job first or be out of compliance with the program rules) and will be unavailable for assignment to the second round of activities. Other cases will complete the enrollment process, but leave the welfare rolls before the assignment to the second round of activities is made. Still other cases will receive deferrals from assignment because of part-time employment, health and transportation problems, lack of child care arrangements, and so forth. If the assignment occurs fairly soon after the enrollment process is completed, however, this "leakage" from the program will probably be fairly small, and predictions of it are likely to be relatively accurate. It is in predicting the number of cases available for assignment to the third and subsequent rounds of program activities that substantial errors are likely to occur. For by then, program leakage will likely be substantial, but its size is difficult to forecast accurately.

e.g.

The importance of leakage is illustrated in Figures 5.2 and 5.3 for 100 typical TANF cases that were assigned to the JOBS labor force attachment models in Riverside and Grand Rapids and attended the program orientation. (See chapter 4 and Appendix A for a description of this model.) As can be seen, while specific flow patterns differed between the two sites, leakage was high in both sites. Thus, the number of cases available for assignment diminished rather rapidly as cases moved through the sequence of program activities. Consequently, while a large fraction of the initial 100 cases in both sites were assigned to job search — the first activity after orientation — only 17 cases in Grand Rapids and only 14 cases in Riverside were ever assigned to any other activities. Moreover, many of those cases that were assigned to job search did not actually participate. This last point is discussed in greater detail in section 5.3.3.

Figure 5.2

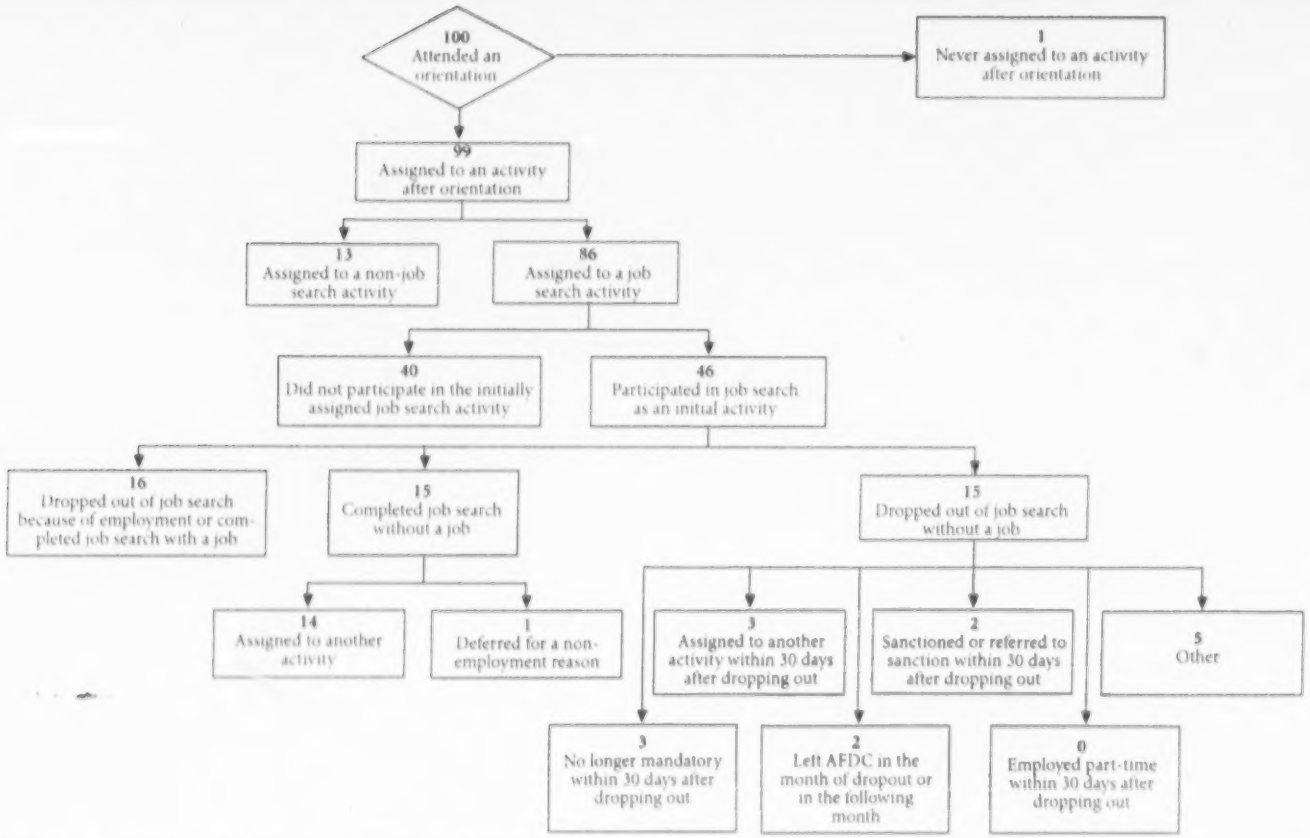
THE FLOW THROUGH RIVERSIDE'S LABOR FORCE ATTACHMENT (LFA) PROGRAM APPROACH FOR 100 TYPICAL LFA SAMPLE MEMBERS WITHIN TWO YEARS AFTER ORIENTATION


100
Attended an orientation
28
Never assigned to an activity after orientation
72
Assigned to an activity after orientation
12
Deferred for a non-employment reason within one month after orientation
6
Employed (deferred or no longer mandatory) within one month after orientation
4
No longer mandatory within one month after orientation (for a reason other than employment)
4
Other (these do not add to the total because of rounding)
4
Assigned to a non-job search activity
68
Assigned to a job search activity
28
Did not participate in the initially assigned job search activity
40
Participated in job search as an initial activity
6
Completed job search without a job
18
Dropped out of job search without a job
16
Dropped out of job search because of employment or completed job search with a job
5
Assigned to another activity
1
Deferred for a non-employment reason
9
Assigned to another activity within 30 days after dropping out
1
Left AFDC in the month of dropout or in the following month
1
Sanctioned or referred to sanction within 30 days after dropping out
1
Employed part-time within 30 days after dropping out
6
Other

SOURCE: Unpublished data from the National Evaluation of Welfare-to-Work Strategies.

Figure 5.3

THE FLOW THROUGH GRAND RAPIDS' LABOR FORCE ATTACHMENT (LFA) PROGRAM APPROACH FOR 100 TYPICAL LFA SAMPLE MEMBERS WITHIN TWO YEARS AFTER ORIENTATION


100
Attended an orientation
1
Never assigned to an activity after orientation
99
Assigned to an activity after orientation
13
Assigned to a non-job search activity
86
Assigned to a job search activity
40
Did not participate in the initially assigned job search activity
46
Participated in job search as an initial activity
16
Dropped out of job search because of employment or completed job search with a job
15
Completed job search without a job
15
Dropped out of job search without a job
14
Assigned to another activity
1
Deferred for a non-employment reason
3
Assigned to another activity within 30 days after dropping out
2
Sanctioned or referred to sanction within 30 days after dropping out
5
Other
3
No longer mandatory within 30 days after dropping out
2
Left AFDC in the month of dropout or in the following month
0
Employed part-time within 30 days after dropping out

SOURCE: Unpublished data from the National Evaluation of Welfare-to-Work Strategies.

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73A

In predicting the number of cases that will be available for assignment to a particular activity, two prior predictions must be made. The first is the length of time after being referred to the program that it will take a typical case that is still active in the program to reach the point at which the assignment might occur. The second prediction is the number of cases that will still be in the program and not be deferred by that point.

e.g.

USING TWO PREDICTIONS TO FORECAST ASSIGNMENT RATES: AN ILLUSTRATION

An examination of the assignment rate for basic education in a hypothetical not-yet-implemented E&T program can illustrate how predictions about the length of time to reach assignment and the number of cases that will still be in the program by that time might be used in forecasting assignment rates. Assume that under this program, cases will be required to complete the enrollment process and two months of job search before becoming eligible for basic education. Further assume that, as a result, four months will pass after a typical case is referred to the program before it will be ready for assignment to basic education. Assume that by then, however, only 80 percent of the original group of referred cases will still be in the program (15 percent will voluntarily leave the welfare rolls and 5 percent will fail to comply with program rules and, consequently, be sanctioned and no longer active in the program). In addition, another 15 percent of the cases will be deferred. That leaves only 65 percent of the originally referred cases available for assignment. Assume that of those available cases, the program managers decide to assign 20 percent to basic education and the remainder to post-secondary education, vocational training, work experience, or a job club. Thus, the assignment rate for basic education will be .65 x .20 = .13.

a. Length of Time to Reach Assignment. The length of time it will take a typical person to reach the assignment point depends on the time she or he spent in previous program activities and the time she or he previously spent without an assignment. Approaches to predicting time that will be spent in previous program components are described later in this section. Predictions of time that will be spent without an assignment by a typical program enrollee will have to be based on judgment. However, considerable relevant information is likely to be available. For example, the extent to which cases are not assigned will be strongly influenced by the resources available for program activities. It will also be influenced by the extent to which program rules allow temporary deferrals to be granted. Information concerning these factors should be available for the agency considering a new program. Moreover, MDRC evaluation reports, some of which are listed in the references at the end of this guide, provide considerable information on the frequency with which such deferrals have been granted in previous mandatory E&T programs.

b. Predicting the Number of Cases. To determine the number of cases that will still be active in a program at various assignment points after they are initially referred, a welfare agency can use its own case file records. The agency would select a sample of cases from some recent point in time — say, one or two years back. The characteristics of the selected cases should be as similar as possible to the cases that would be referred to the proposed program. For example, only those cases that meet program eligibility

criteria should be selected. The agency can then determine the fraction of cases that were still on the rolls after one month, after two months, after three months, and so forth. These figures should be adjusted downward to account for the likely effects of the not-yet-implemented program itself. For example, *as a result of the program*, some enrollees who would otherwise remain on the rolls will obtain employment and leave the rolls. Other enrollees will refuse to comply with program rules and, hence, will never make it to the assignment point (although they may be sanctioned). MDRC evaluation reports provide considerable information useful in determining the likely size of each of these two groups. Appendix Table F.1 indicates the effect of the JOBS program on AFDC receipt.

5.3.3 Predicting Participation Rates (Step 4)

As illustrated in Figures 5.2 and 5.3, not all those assigned to a program activity will actually participate. Some might leave the welfare rolls before the activity begins, while others will not show up and, consequently, be out of compliance with the program. As discussed earlier, "leakage" of this sort also affects assignment rates.

It is difficult to predict accurately the rate of participation among those assigned to any specific program activity; one must rely largely on educated guesses. However, these guesses can be made more accurate by paying special attention to two factors. First, participation rates will decline as the interval between assignment to a program activity and the start of the activity increases. Some idea of how the length of this interval is likely to affect participation rates can be obtained by examining the rate at which cohorts of cases leave the welfare rolls. (See the discussion in section 5.3.2.)

Second, some program activities (for example, vocational training) are likely to be relatively more attractive to those assigned to them than others (for example, unpaid work experience). Thus, frequency of noncompliance may be greater among those assigned to the latter than to the former activities. However, noncompliance may, perhaps, be reduced if sanctions are vigorously enforced. Some idea of the frequency of noncompliance among cases assigned to particular program components can be obtained by examining previous experiences at both the sites considering the proposed program and elsewhere. (Again, see the discussion in section 5.3.2.)

5.3.4 Predicting the Average Length of Participation (Step 5)

The average time spent participating in a particular program activity or receiving a particular program support service will depend upon the characteristics of those participating, the local economy, and the rules of the program.

e.g.

Project Independence, a welfare-to-work program in Florida that was evaluated by MDRC several years ago, required two weeks of independent job search for cases referred to the program that were deemed job-ready. However, this two-week period should be viewed as a maximum, as some of those who began the job search left the program earlier because they found a job or for other reasons. This was especially likely because cases were assigned job search only if they were considered job-ready. It was also likely because unemployment rates in Florida were quite low at the time the evaluation was conducted.

In predicting the average time spent in a particular program activity or receiving a service, it is useful to examine information on previous experience with a similar program component. Doing this is especially likely to be helpful if the information pertains to programs currently or previously run at the sites considering the not-yet-implemented program, because it will help control for the effects of participants' characteristics and the condition of the local economy on time spent in various program components. Even then, however, adjustments will have to be made for differences between the old and new programs in program rules, economic conditions, and the characteristics of those likely to participate in the program component. Participants' characteristics are especially likely to differ if the not-yet-implemented program will offer a particular component at a different point in the program sequence than was previously the case. The necessary adjustments will have to be made on the basis of informed judgments about these differences, as there is unlikely to be a firmer basis on which to make them.

If a similar program activity or support service has not been previously offered at the program sites considering the not-yet-implemented program, or if information does not exist on average time spent in the program component, then the prediction of the average length of participation can be based on the experiences of other sites that have offered the component. Average time estimates for three JOBS program sites are presented in Appendix C, which also includes estimates from MDRC evaluations for ongoing programs in a number of additional sites. In this instance, however, the adjustments may have to be quite substantial. Economic conditions, the characteristics of participants, and program rules are all likely to differ considerably between the sites considering a not-yet-implemented program and sites included in the MDRC studies. Obtaining information on all these differences will be helpful in forming the judgments necessary to make the required adjustments. Such information is available in MDRC's evaluation reports.

Estimates of average length of participation derived from existing programs may also need to be scaled back to account for the fact that the costs of the not-yet-implemented program are being predicted for a 12-month period, while cost analyses of ongoing programs often measure length of participation over a longer time period. This is especially likely in the case of lengthy program activities, such as vocational education and college, and certain support services, such as child care.

5.3.5 Estimating Unit Costs (Step 6)

An estimated unit cost of a particular activity in a not-yet-implemented E&T program can be obtained in three different ways:

1. It can be based on the unit costs of a similar activity in an ongoing program at the sites considering implementing the proposed program.
2. Less ideally, it can be based on the unit cost of a similar activity in ongoing programs at other sites.
3. It can be estimated by a program unit cost approach. Under this approach, the cost of providing a group of individuals with the activity is first estimated (for example, the cost of a month-long basic education class). Then, the estimated

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cost is divided by the size of the group (for example, the number of persons in the class) to obtain a measure of unit costs (in the case of our example, costs per person per month).

Unit costs that are obtained under the first and third of these approaches rely on data from the sites considering the proposed program. Thus, once unit costs are predicted using these approaches, it will usually also be possible to allocate unit costs among the components — that is, the percentage accounted for by salaries paid to classroom teachers, by support staff salaries, by rent for classrooms, and so forth. Consequently, as discussed in greater detail in chapter 6, unit cost estimates obtained under the first and third approaches can be used to develop an operational budget for the program. Unit cost estimates that are based on data from other sites (the second approach) typically cannot be used to do this because insufficient information is available to allocate unit costs among the components.

Because the first two of the approaches listed above rely on unit cost estimates that already exist, they often require somewhat less effort than the third approach. However, appropriate existing estimates are not always available for all the activities proposed as part of a not-yet-implemented program because the program may differ substantially in some respects from previous E&T programs. Under such circumstances, the third approach can be used instead. As discussed next, however, even if appropriate existing unit cost estimates are available, they still must usually be adjusted in various ways before they can be adopted. Although these adjustments are typically greater when the estimates are from sites other than those considering the proposed program, the adjustments are sufficiently similar that the first two approaches can be discussed together. The third approach is quite different from the first two and, therefore, is discussed separately.

a. Using Existing Estimates of Unit Costs. Chapter 3 provides details on how unit costs can be computed for ongoing programs. Chapter 4 presents unit cost estimates for the Riverside JOBS program site, and Appendix E presents unit cost estimates for a number of additional ongoing E&T programs that have been evaluated by MDRC. In examining these estimates, it is apparent that unit costs for the same activity vary considerably among E&T programs and even among different sites running the same program. The tables presented in Appendix E indicate specific reasons why unit costs in some of the programs and sites are especially high or low.

SOME SOURCES OF VARIATION IN UNIT COSTS

- differences in salary and fringe benefit levels;
- differences in staff/client ratios;
- if case management costs are included in unit costs, as they often are, differences in case management/client ratios;
- whether or not incentive bonuses are paid to staff or to contractors operating the activity;
- differences in how classes are run — for example, a fixed cycle, in which enrollees must begin at the start of the cycle, or open enrollment, in which someone else can fill the open slot that results when a participant drops out.

In using unit cost estimates from an ongoing program to predict unit costs for a not-yet-implemented program, two important adjustments should be made. The first adjustment is needed to take account of differences in salary and fringe benefit levels between those staffing the ongoing program and those who will staff the not-yet-implemented program. This adjustment is likely to be minor if the new program will operate at the same sites as the former program. Still, adjustments should be made if staff salary and fringe benefit levels have changed appreciably over time or if the salaries and benefits of personnel for the not-yet-implemented program will be higher or lower than those in the ongoing program.

The adjustment may be considerably more important if unit cost information for an ongoing program is obtained from different sites than the ones in which the not-yet-implemented program will operate because staff salary and fringe benefit levels are likely to vary considerably between the two sets of sites. In this instance, it is helpful to obtain data on staff salary and fringe benefit levels for both sets of sites whenever feasible. Then, unit cost estimates that were obtained from the ongoing program can be adjusted by using the ratio of staff salaries and fringe benefits in the new sites to staff salaries and fringe benefits in the ongoing program sites. In making this adjustment, however, a distinction must be made between personnel costs (including those engendered by support staff) and the costs of physical resources. Differences in salaries and fringe benefits affect personnel costs, but not the costs of physical resources.

e.g.

Consider a situation in which salaries and fringe benefits are 25 percent higher in sites considering a not-yet-implemented program than in the sites from which unit cost estimates were obtained. If personnel costs account for 80 percent of the total cost at the sites considering the new program and physical resources account for the remaining 20 percent, the unit cost estimates from the sites with the ongoing program can be adjusted by multiplying them by 1.2 [(1.25 x .8) + .2 = 1.2].

The second adjustment is required to account for differences in staff/client ratios between the ongoing program and the not-yet-implemented program.

e.g.

Consider a not-yet-implemented program in which the numbers of persons attending orientation sessions are expected to be twice as large as in the ongoing program, and there are no other differences between the two programs — the size of the staff leading the orientation sessions remains fixed, the same room is used for the sessions, and no additional equipment is needed. Under such circumstances, the unit cost estimate for orientation that was obtained from the ongoing program should be reduced by half before it is used to predict the costs of the not-yet-implemented program.

The adjustment is more complex if some costs remain fixed when class size increases, while other costs rise.

e.g.

Assume that the size of a vocational training class is doubled, but that the number of instructors remains fixed. However, all other costs (for example, classroom rental and equipment costs) are doubled (that is, they increase in proportion to the increase in class size). Further assume that instructor costs account for 40 percent of the total cost of vocational training in the ongoing program and, hence, other costs account for the remaining 60 percent. In this case, a unit cost estimate for vocational training from the ongoing program can be adjusted by multiplying it by .8 [(.5 x .4) + .6 = .8].

One can readily imagine even more complicated situations — some costs might remain fixed, some might increase by 50 percent, and still others might double. In such cases, it can be very difficult to determine the size of the adjustment factor. Under these circumstances, it may be better to forecast unit costs for the not-yet-implemented program directly, rather than attempting to adjust an estimate from an ongoing program. This possibility is addressed next.

b. Program Unit Approach. Unit costs measure expenditures incurred in providing an E&T service to one individual over a specified time period. However, individuals often participate in E&T program activities as part of a group — for example, in a classroom setting. When this occurs, unit costs are usually most readily predicted by first estimating the cost of serving the entire group and then dividing group costs by the number of persons in the group.

e.g.

Predicting the unit costs for a job club, for example, might be done as follows:

1. Determine the duration of the job club and the number of hours it would meet each day — say, four hours a day over a three-week period.
2. Determine the average number of persons who would be served by the job club during the three weeks it would operate. One might anticipate, for example, that the job club would start with 10 people, but that two members would find jobs by the beginning of the second week and that two more would find jobs by the beginning of the third and final week. Unless new club members replace those who leave, an average of 8 people would participate in the job club over the three-week period, although it has the capacity to serve 10.
3. Determine the resources required for running one job club for three weeks — the number of chairs, the number of instructors/coaches, additional case manager time, additional support staff time, the number of phones, and so forth.
4. Determine the cost of each of the required resources — for example, the salary and fringe benefits paid per hour to each of the required personnel, the costs for space and equipment (such as telephones), the cost of necessary supplies, and so forth.
5. Determine the total cost of running one job club by summing all the resource costs obtained from step 4. (As previously discussed, the cost of resources that are available for use by the job club and would otherwise be unused, such as an empty classroom, should not be included in this sum.)[1]

1. As explained in chapter 2, using a resource that would otherwise be unused for an E&T program is essentially cost-free to the organization with the resource. However, if a community-based organization were operating job clubs under subcontract to a welfare agency, it would usually incorporate the costs of otherwise unused resources into its charges to the agency.

6. Determine unit costs by dividing the sum obtained from step 5 by the average number of persons served, as determined by step 2. It is important that the average size of the group, rather than its maximum size, be used. The average size allows for the fact that the unit cost of a class that has excess capacity is larger than the unit cost of a class that is always filled to capacity. It is also necessary to use the average group size in order to maintain consistency with the prediction of the average length of participation.[2]

An important byproduct of using these six steps to predict unit costs is that they provide information that is useful in planning for a proposed E&T program. Once class size and the average duration of a course are determined, for example, these values can be combined with predictions of the number of persons who will participate in the activity during a year (as determined by steps 2–4 in estimating the gross costs of not-yet-implemented programs) to estimate the number of classes needed during the year and the number that will have to be run at any point in time. If outside organizations are to be solicited to deliver the service, the information on class capacity, number of classes, cost per class, and so forth can be used to specify a Request for Proposals.

e.g.

If about 1,000 persons were expected to be enrolled in job clubs during a year and each job club began with 10 members, about 100 job clubs would have to be run over the year. Thus, two new job clubs would have to be initiated each week. Moreover, if a job club lasted three weeks, six clubs would be running at any point in time. By running three classes in the morning and three in the afternoon, classroom requirements could be held to three.

5.4 Changes in Program Costs Over Time

As indicated earlier, the procedures described here for predicting the cost of a not-yet-implemented mandatory E&T program are directed at costing out the program during its first year after full implementation. Once past the first year, however, program costs could change dramatically: the program design might be changed, perhaps because experience with operating the program suggests improvements that can be made; unit costs could increase or decrease over time — for example, as a result of changes in prices or in the client mix in the E&T program; or the economy might change, altering both

2. For example, in our illustration, six cases remain in the job club for all three weeks, two cases participate for two weeks, and two cases participate for only one week. Thus, the average length of participation is 2.4 weeks (or [(6 x 3) + (2 x 2) + (2 x 1)]/10) and the average number of cases over the three weeks is eight. Therefore, if the total cost of operating the job club for a week is, say, $1,000, then unit cost (cost per participant per week) is $125 (or $1,000/8) and the cost incurred by one typical job club participant while the job club is in session is $300 (or 2.4 x $125). Now consider an alternative possibility: all job club participants remain in the job club for the full three weeks, but the total costs of operating the club for one week remain at $1,000. Under these circumstances, unit costs would fall to $100 (or $1,000/10), but the cost incurred by one typical participant would still be $300 (or 3 x $100).

the number and characteristics of the persons entering the program. These changes and their effects on costs can rarely be predicted with any reliability.

Even if the program design and the economy remain stable, however, program costs will still change over time, probably diminishing. Moreover, these changes may be quite sizable. One reason program costs may fall over time is that the number of cases referred to a mandatory E&T program will probably decline. A second reason is that the proportion of cases in the program that are assigned to relatively expensive activities is likely to decline and the proportion assigned to less expensive activities is likely to increase.

e.g.

To see this, consider a new E&T program. Although our illustration is grounded in the provisions of TANF, several simplifying assumptions about the new program are made initially to keep the example as clear as possible. First, let us assume that *all* cases that have been on the TANF rolls for at least two years are required to participate in the new program, but that no cases that have been on the rolls less than two years are allowed to participate. Let us further assume that the welfare agency that will operate the new program began running the clock on a five-year lifetime time limit for *all* TANF recipients one year prior to beginning the new program. As a result, TANF recipients will begin to become subject to the time limit four years after the E&T program is put into place and, as they do, they will begin to leave the program. Finally, let us assume the welfare agency that is implementing the new program is not currently operating an E&T program. (Some of these assumptions will be modified later.)

Given the assumptions just made, all TANF cases that have been on the rolls for over two years — most of the caseload — will be referred to the E&T program during its first year. Now, consider the program's second year. On the one hand, while some of the originally enrolled cases will remain in the program, others will leave (for example, some will find jobs). On the other hand, still other cases will begin their third year on the TANF rolls and, hence, be newly required to enter the E&T program. However, if the program is successful, it will increase the number of cases leaving the TANF rolls. Consequently, more cases will leave the E&T program than enter, and the total number of cases receiving E&T services will fall. This reduction will continue for several years, causing program costs to fall over time.

Now consider the end of the program's fourth year. At that time, most of the pool of cases that were referred to the program in its first year and who remain on the TANF rolls will become subject to the five-year time limit. Hence, they will lose their eligibility for TANF and leave the program. At the end of the program's sixth year, only cases that are in their third, fourth, or fifth year on TANF will be in the program; longer-term welfare cases will be gone. This will cause a reduction, probably a substantial one, in the number of cases in the program, again causing program costs to fall.

Assignment rates to different program activities will also change over time. Cases that remain in the program that were assigned to comparatively expensive activities such as basic education and vocational training in the program's first year will eventually complete these activities. Upon doing so, they are likely to be reassigned to relatively less expensive activities such as work experience. These cases will be replaced in the more expensive activities by cases that newly enter the E&T program, but only partially.

e.g.

To see this, imagine that during the program's first year, *all* those cases in the E&T program that would appear to benefit from basic education and vocational training are assigned to these activities, but at the end of the first year, these cases are all reassigned to work experience. During the program's second year, additional cases will be assigned to basic education and vocational training. However, these cases will be drawn exclusively from among those cases that are in their third year on the TANF rolls and, hence, newly referred to the E&T program. Older cases will have been previously assigned to basic education and vocational training. Thus, during its first year, the program will have a much larger pool of cases from which to draw for assignment to basic education and vocational training than during its second year. Hence, the proportion of cases in basic education and vocational training will fall between the program's first and second year, while the proportion in work experience will grow. This change, in turn, will decrease program costs.

All the factors discussed above will cause the costs of a newly adopted E&T program to diminish over time. However, if the new program is implemented gradually, costs might increase until the implementation is complete. Thus, gradual implementation could cause program costs to decline more slowly over time, or perhaps not at all.

5.4.1 An Assessment of the Issue

To acquire some sense of the importance of the factors that cause E&T costs to diminish over time, we used a well-established mathematical tool, Markov Chain Analysis, to develop a model.[3] This mathematical model allows us to examine the extent to which the number of cases in the E&T program and the number of cases assigned to various program activities will change over time under different sets of circumstances.

In utilizing the Markov model for this purpose, let us assume that a welfare agency that does not currently have an E&T program is introducing one for cases on TANF that have accumulated more than two years of benefits. It is assumed that, at the same time, the welfare agency also adopts the five-year lifetime time limit required by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Consistent with the provisions of the Act, let us also assume that 20 percent of the cases receiving TANF will be exempt from the time limits. In addition, assume that the agency fully implements the E&T program immediately upon introducing it, rather than gradually implementing it. Finally, assume that prior to the introduction of the program and the time limit the agency's TANF caseload has been stable. That is, each case that left the TANF rolls was replaced by a new case and, hence, the size of the caseload was not changing over time. As discussed earlier, after the program and time limits are introduced, the caseload will fall for several years and, consequently, the number of cases in the E&T program will also fall.

3. Briefly, Markov Chain Analysis permits one to determine movements of individuals off and on the TANF rolls and the distribution of recipients by number of years on the rolls under steady-state conditions. A Markov chain is a dependent stochastic process. The key assumption is that the probability of an individual moving onto the TANF rolls is not influenced by how long she has been off the rolls, and the probability of an individual moving off the TANF rolls is not influenced by how long she has been on the rolls. Future manifestations of a Markov chain are treated as completely determined by the present state of the system — that is, as independent of the past.

Using the Markov model requires that an assumption be made about the rate at which cases were permanently leaving the TANF rolls prior to the introduction of the new E&T program and the five-year time limit. The rate that is most appropriate to use for this purpose is not apparent. Prior to passage of the 1996 welfare law, the rate at which AFDC cases permanently left the rolls appears to have varied considerably among welfare agencies and over time. For example, MDRC evaluations imply that, depending on the specific site and time period studied, between 0.5 and 1.5 percent of AFDC cases were permanently leaving the rolls each month prior to the Personal Responsibility and Work Opportunity Reconciliation Act.[4]

As a starting point for this analysis, a rate is used that falls near the top of this range, 1.2 percent. This particular rate was selected because when it is used, the Markov model implies that prior to introducing an E&T program and time limits, 74 percent of a welfare agency's caseload would have been on the rolls for two or more years and 46 percent for five or more years. This appears reasonably consistent with the empirical evidence. For example, estimates that were made by Sheila Zedlewski and Isabel Sawhill just prior to passage of the 1996 law indicate that 70 percent of the single-parent AFDC caseload had been on the rolls for over two years and 40 percent for over five years.[5]

Based on the 1.2 percent assumption, the findings indicate that the five-year time limit will have a dramatic effect on the number of cases in the E&T program after it takes effect. Specifically, for every 100 cases enrolled in the program at the time it is initiated, the Markov model predicts that only 56 cases will be enrolled once the caseload has fully adjusted to the time limit. The number of cases declines even further if the monthly rate at which cases permanently leave the TANF rolls increases as a result of the E&T program. For example, if the rate increases from 1.2 to 2.0 percent and the five-year time limit remains in place, the Markov model indicates that for every 100 cases initially in the E&T program, only 50 cases will be enrolled once the caseload adjusts.[6] Apparently, therefore, the combined effect of the time limit and the increase in the rate at which cases exit from the TANF rolls is to greatly reduce program costs over time.

a. How Sensitive Are the Findings to the 1.2 Percent Assumption? It is now assumed that the rate at which cases are leaving the TANF rolls each month is only 0.5 percent, a figure that is at the bottom of the range. It is also assumed that the rate of leav-

4. This 0.5 to 1.5 range is best viewed as a rough approximation. MDRC evaluations do not attempt to determine the rate at which cases permanently leave the welfare roles each month. However, they do determine the percentage of cases in their evaluation samples that are still on the rolls each month after the samples were initially drawn. It is this information that we used to obtain the estimates upon which the 0.5 to 1.5 percent range is based. To obtain these estimates, it was necessary to distinguish first between cases that left the rolls permanently and cases that left the rolls only temporarily. This, in turn, required us to make certain strong simplifying assumptions. The estimates are probably sensitive to these assumptions.

5. Zedlewski, S., and I. Sawhill. 1995. "Assessing the Personal Responsibility Act," *Welfare Reform Briefs*, No. 5, Washington, D.C.: The Urban Institute Press.

6. Because we first examined the effect of the five-year time limit on the number of cases in the E&T program, the relatively small further effect of the increase in the rate at which cases permanently leave the TANF rolls is not surprising. The increase affects only cases that have been on the rolls for less than five years and cases that are exempt from the five-year time limit. All other cases left the rolls as a result of the time limit.

ing will increase to 1.0 percent per month, rather than to 2.0 percent, as a result of the program. Given these new assumptions, the Markov model implies that for every 100 cases in the program when it is initially introduced, only 33 (rather than 50) cases will be in the program once the caseload fully adjusts to the time limit and to the increase in the rate at which cases exit the TANF rolls. This suggests that specific estimates based on the Markov model are quite dependent upon specific assumptions about rates of leaving TANF and, consequently, should be used with great caution. Perhaps more important, however, regardless of the specific assumptions about exit rates, the model consistently implies that the number of E&T participants and, hence, program costs would greatly diminish over time.

In this example, most cases that are referred to a mandatory E&T program are assigned to fairly expensive activities such as basic education and vocational training at the time the program is initiated. However, the Markov model implies that a few years after the program has been initiated, over 70 percent of the cases participating in the program will have been in the program for over a year. These cases are likely to be reassigned to fairly inexpensive program activities such as workfare. As a result, program costs may decline substantially.

b. Effect of Policy Decisions. The findings discussed above pertain to a specific E&T program. It seems useful to examine how different policy decisions regarding the program design affect the results. To investigate this issue, we change only one program design characteristic at a time, leaving all the others unchanged. We also once again assume that at the time the E&T program is implemented, 1.2 percent of the cases are leaving the TANF rolls each month and that this rate increases to 2.0 percent as a result of the program. The findings can, therefore, be compared with the earlier reported result that for every 100 cases initially in the E&T program, only 50 cases would be in the program after the caseload adjusts to the time limit and the increase in the rate at which cases exit the TANF rolls. Four different program design changes are examined in the examples that follow. Again, the Markov model is applied to estimate the results of the changes.

e.g.

The 20 percent exemption to the five-year time limit is weakly enforced and, consequently, 30 percent of the cases in the TANF caseload are actually exempt. ***Finding:*** For every 100 cases in the E&T program when it is initially introduced, only 63 cases will be in the program once the caseload fully adjusts to the time limit and the increase in the rate at which cases exit the TANF rolls.

e.g.

Instead of exempting 20 percent of the caseload from the five-year time limit, a decision is made to exempt no cases. ***Finding:*** For every 100 cases in the E&T program when it is initially introduced, only 38 cases will be in the program once the caseload fully adjusts to the time limit and the increase in the rate at which cases exit the TANF rolls.

e.g.

A decision is made to refer cases to the E&T program after they have accumulated one year, rather than two years, of TANF benefits. ***Finding***: For every 100 cases in the program when it is initially introduced, only 62 cases will be in the program once the caseload fully adjusts to the time limit and the increase in the rate at which cases exit the TANF rolls.

e.g.

A decision is made to reduce the lifetime limit on the TANF rolls to three years, rather than five years. ***Finding***: For every 100 cases in the program when it is initially introduced, only 27 cases will be in the program once the caseload fully adjusts to the time limit and the increase in the rate at which cases exit the TANF rolls.

These findings suggest that the amount by which the number of cases in a mandatory E&T program and, hence, program costs would diminish over time would vary greatly with the specific program design and the manner in which the program is implemented. Regardless of the specific program design, however, it seems evident that program costs would greatly diminish over time. Anyone costing out a not-yet-implemented E&T program or using the resulting cost estimates should be aware of this possibility.

5.5 Predicting the Net Costs of a Not-Yet-Implemented Program

As shown in chapter 2, estimates of the net costs of a proposed E&T program are more useful for certain purposes, such as determining whether the proposed program should replace an existing program, than are estimates of the program's gross costs. For such purposes, the net costs of the proposed program can be determined by subtracting an estimate of the aggregate gross costs of the current program from the estimated aggregate gross costs of the proposed program. In other words, the difference between these two estimates provides a measure of the cost of replacing the old program with the proposed one.

An estimate of gross cost per case referred to the current program can be obtained by using the seven-step procedure described in chapter 3. Because the estimate of the cost of the proposed program is predicted for a 12-month period, it is important that the estimate of gross cost per case for the current program also pertain to a year. Thus, cost information for the research sample used to conduct the cost analysis of the ongoing program should be collected over a 12-month period. Otherwise, the cost estimates for the two programs will not be comparable.

The estimate for the current program can be converted into an aggregate measure by multiplying it by the number of cases referred to the current program over 12 months. In doing this, it is important to multiply by the number of cases referred to the ongoing program, not the number that will be referred to the not-yet-implemented program. Otherwise, the net cost estimate will not appropriately reflect the effect of differences between the two programs in the sizes of their caseloads.

A SUMMARY OF THE STEPS FOR ESTIMATING THE GROSS COSTS OF A NOT-YET-IMPLEMENTED PROGRAM

Step 1. **Develop a flow diagram.** Develop a detailed flow diagram of the proposed program.

Step 2. **Predict total program referrals.** Predict the total number of cases that will be referred to the program during the first 12 months after it is implemented.

Step 3. **Predict the assignment rates for each program component.** Of those cases referred to the program (see step 2), predict the fraction that will be assigned during the program's first year to each of the program activities that appear in the flow diagram developed in step 1.

Step 4. **Predict the participation rate for each program component.** Of those cases assigned to each of the program activities, predict the fraction that will actually participate in the activity.

Step 5. **Predict the average length of participation.** Predict the average length of time that cases that participate in each program activity will remain in the activity.

Step 6. **Estimate unit costs.** Using time units that are consistent with those used in step 5, estimate the unit cost of each program component.

Step 7. **Compute costs per referred case for each program activity and support service.** Make the following computation for each program activity and support service: step 3 x step 4 x step 5 x step 6.

Step 8. **Compute total costs per referred case.** To obtain a prediction of total program costs per referred case, sum all the average cost values obtained in step 7.

Step 9. **Compute aggregate program costs.** To obtain a prediction of aggregate program costs, multiply the value obtained in step 2 by the value obtained in step 8.

Chapter 6

Using Cost Information in Designing, Bidding, and Budgeting

The earlier chapters of this guide provide detailed suggestions on how to conduct a cost analysis of an ongoing E&T program and how to predict the costs of a proposed E&T program. Once the information required for either type of cost analysis has been gathered and assembled, there are several additional ways in which it can be used. This chapter first explains why conducting sensitivity tests in performing cost analyses is useful and important, and how such tests can be conducted. The chapter then discusses how community-based organizations that are bidding to provide employment and training program services can use the guide in developing cost estimates, and how program agencies can use the guide to structure bids so they can be readily compared. The last section of the chapter describes how the information provided in the guide can be used to develop a budget for a proposed employment and training program — specifically, how total program costs can be broken down into the program's operational components.

6.1 Sensitivity Test

Chapter 3 described a seven-step method for determining the gross costs of currently operating employment and training programs. In Chapter 4, Table 4.8 used the Riverside LFA program to illustrate how these steps can be applied to an actual ongoing program. For the reader's convenience, the required computations are repeated in Table 6.1.

The calculations that appear in Table 6.1 were made by the computer spreadsheet found on the disk accompanying this guide. By using this spreadsheet, it becomes very easy to conduct "sensitivity tests" — that is, to determine how the costs of a current program will change if the program is modified (for example, if the number of cases assigned to various program activities is changed or if a new activity is introduced). The remainder of this section illustrates a number of such sensitivity tests. (Example 2 in section 5.2 illustrates the use of sensitivity tests in conducting cost analyses of not-yet-implemented employment and training programs.)

Table 6.2 lists a number of (hypothetical) modifications to the Riverside LFA program that a welfare agency might consider. Predictions of the changes in costs that would result from these program modifications are reported in Table 6.2. As should be evident from the table, determining the cost effects of modifying an ongoing program sometimes requires predictions of unit costs, participation rates, and the average length of stay in program activities. These values can be obtained by using the techniques described in chapter 5.

Table 6.2 indicates that some of the hypothetical program modifications would increase costs and others would decrease costs. Moreover, relative to the total cost of $1,163 per referred case, some of the modifications would result in very modest changes in costs, while others would cause substantial changes. While each program modification is considered separately here, several could obviously be combined. Some of the savings from reducing the length of time in basic education, for example, could be used to pay for increasing unit costs by enriching this activity while cases are participating, perhaps by reducing student/teacher ratios. Furthermore, the cost implications of more fundamental changes in the program, such as those that might be required by a changing case mix or adopting a different program model, can be examined by conducting additional, somewhat more elaborate, sensitivity tests. Two examples of these more basic modifications are considered next.

Costs would change if the Riverside LFA model were to serve a more difficult caseload — for instance, if relatively job-ready TANF recipients were served first by the program, and the program later began to enroll recipients with less job experience and education, or if the scale of program operations increased and, as a consequence, less job-ready, as well as more job-ready, cases were served.

Table 6.3, which was computed using the disk that accompanies this guide, provides a prediction of the changes in costs that could result if less job-ready cases were to be served but the program model were to remain basically intact. The table is meant only to

Table 6.1

ESTIMATING THE COSTS OF AN ONGOING PROGRAM
Two-Year Costs of Riverside's Labor Force Attachment Approach

Step 1 List Program Components	Step 2 Unit Cost Estimates of Program Components	Step 3 Select the Analysis Sample for Steps 4 and 5 [a] — Step 4 Participation Rate [b]	Step 3 — Step 5 Average Length of Stay [c]	Step 6 Gross Cost per Referred Case per Program Component	Step 7 Total Gross Cost per Referred Case
PROGRAM ACTIVITIES					
Orientation and appraisal					
Welfare department	$ 79	1.30 [d]	1 session	$ 103	
Non-welfare department	$ 0	1.30	1 session	$ 0	
Formal assessment					
Welfare department	$ 535	0.01	1 session	$ 6	
Non-welfare department	$ 0	0.01	1 session	$ 0	
Job search					
Welfare department	$ 682	0.55	2.3 months	$ 865	
Non-welfare department	$ 0	0.55	2.3 months	$ 0	
Basic education					
Welfare department	$ 229	0.02	5.4 months	$ 26	
Non-welfare department	$ 528 [e]	0.02	5.4 months	$ 60	
College					
Welfare department	$ 110	0.00	0 months	$ 0	
Non-welfare department	$ 500 [f]	0.00	0 months	$ 0	
Work experience					
Welfare department	$ 514	0.00	0 months	$ 0	
Non-welfare department	$ 0	0.00	0 months	$ 0	
SUPPORT SERVICES					
Child care					
Welfare department	$ 134	0.17	2.5 months	$ 59	
Non-welfare department	$ 0	0.17	2.5 months	$ 0	
Transportation					
Welfare department	$ 21	0.56	2.6 months	$ 32	
Non-welfare department	$ 0	0.56	2.6 months	$ 0	
Ancillary services					
Welfare department	$ 65	0.13	1.5 months	$ 12	
Non-welfare department	$ 0	0.13	1.5 months	$ 0	
Total gross cost per referred case				**$ 1,163**	

SOURCES: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997. For support services: unpublished data from MDRC research.

NOTES: These data are for the subsample without a high school diploma or GED certificate.

Rounding may cause slight discrepancies in calculating sums.

a. The data on participation rates (step 4) and average length of participation (step 5) were obtained from a sample of 193 cases that were assigned to Riverside's LFA program.

b. The percentage of the analysis sample participating in each activity and receiving each service within two years of attending orientation.

c. Average months participating in each program activity and receiving each support service per participant within two years of attending orientation. Estimates are based on only those who participated in the activity or received the service.

d. On average, 1.3 sessions were attended.

e. $4 per hour for 132.0 hours of basic education.

f. $5.73 per hour for 87.3 hours of college.

Table 6.2

ILLUSTRATIONS OF CHANGES IN COSTS RESULTING FROM ALTERNATIVE MODIFICATIONS TO THE RIVERSIDE LFA PROGRAM

Program Modification	Change in Costs per Referred Case Resulting from the Modification		
	Welfare Department	Non-Welfare Department	Total
Increase in the job search participation rate from .55 to .7	$233	$ 0	$233
Decrease average length of stay in basic education by two months	-10	-24	-34
Enrich basic education so that non-welfare unit costs increase by $200	0	19	19
Eliminate transportation allowances	-32	0	-32
Provide vocational training to 5% of the cases referred to the program[a]	43	165	208

NOTE: a. The following values were used to make these calculations: unit cost for the welfare department = $110; unit cost for non-welfare departments = $422; predicted average length of stay = 7.8 months. These values were adopted from the Riverside HCD program, which, unlike the Riverside LFA program, offered vocational training.

illustrate the sort of simulation exercise that could be conducted to ascertain the cost implications of moving from a more job-ready to a less job-ready caseload. Thus, it is based on hypothetical assumptions.

A comparison of Table 6.3 with Table 6.1 indicates, not surprisingly, that costs per case would increase substantially (from $1,163 to $2,010) were the program to serve a more difficult caseload. A more detailed comparison of the two tables suggests that changes in costs would result because numerous different adjustments would be necessary as caseload composition changes. Indeed, one of the major advantages of using a spreadsheet to simulate the effects of a change in caseload composition on costs is that a multitude of adjustments can readily be taken into account at once. At the same time, however, the simulation is also helpful in illuminating the major factors that would cause costs to change.

In the illustration, much of the cost increase results because it is assumed that many more members of the less job-ready caseload would be assigned to basic education than members of the more job-ready caseload, and these cases would remain in basic education longer. In addition, it is further assumed that unit costs for basic education would rise because additional case management would be required. Substantially higher costs also result because it is assumed that to more effectively serve the less job-ready caseload, the program agency would hire an outside contractor (a retention service) to follow up on those cases that obtain jobs. The contractor would help resolve problems that arise and receive an incentive payment for each person who remains employed for at least 90 days.

Table 6.3

ESTIMATING THE COSTS OF AN ONGOING PROGRAM Serving a Harder-to-Serve Caseload: A HYPOTHETICAL EXAMPLE

Step 1 List Program Components	Step 2 Unit Cost Estimates of Program Components	Step 3 Select the Analysis Sample for Steps 4 and 5 — Step 4 Participation Rate [a]	Step 3 — Step 5 Average Length of Stay [b]	Step 6 Gross Cost per Referred Case per Program Component	Step 7 Total Gross Cost per Referred Case
PROGRAM ACTIVITIES					
Orientation and appraisal					
Welfare department	$ 100	1.27 [c]	1 session	$ 127	
Non-welfare department	$ 0	1.27 [c]	1 session	$ 0	
Formal assessment					
Welfare department	$ 600	0.01	1 session	$ 6	
Non-welfare department	$ 0	0.01	1 session	$ 0	
Retention services					
Welfare department	$ 25	0.80	2.5 months	$ 50	
Non-welfare department	$ 80	0.80	2.5 months	$ 160	
Job search					
Welfare department	$ 682	0.40	2.7 months	$ 726	
Non-welfare department	$ 0	0.40	2.7 months	$ 0	
Basic education					
Welfare department	$ 280	0.14	6 months	$ 235	
Non-welfare department	$ 516 [d]	0.14	6 months	$ 433	
College					
Welfare department	$ 110	0	0 months	$ 0	
Non-welfare department	$ 500 [e]	0	0 months	$ 0	
Work experience					
Welfare department	$ 530	0.01	4 months	$ 21	
Non-welfare department	$ 0	0.01	4 months	$ 0	
SUPPORT SERVICES					
Child care					
Welfare department	$ 143	0.30	4 months	$ 172	
Non-welfare department	$ 0	0.30	4 months	$ 0	
Transportation					
Welfare department	$ 24	0.65	4 months	$ 62	
Non-welfare department	$ 0	0.65	4 months	$ 0	
Ancillary services					
Welfare department	$ 72	0.25	1 month	$ 18	
Non-welfare department	$ 0	0.25	1 month	$ 0	
Total gross cost per referred case				**$ 2,010**	

NOTES: a. The percentage of the analysis sample participating in each activity and receiving each service within two years of attending orientation.

b. Average months participating in each program activity and receiving each support service per participant within two years of attending orientation. Estimates are based on only those who participated in the activity or received the service.

c. On average, 1.27 sessions were attended.

d. $4 per hour for 129.0 hours of basic education.

e. $5.73 per hour for 87.3 hours of college.

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e.g.

To illustrate a simulation test of a fundamental change in an E&T program, we consider a TANF agency that is considering shifting its E&T program from a human capital development model to a labor work force attachment model, but leaving the composition of the program caseload unchanged. Table 6.4 provides cost estimates of the HCD approach used in Riverside. (See chapter 4 for a description of the HCD program model.) For purposes of this example, these estimates are used as measures of costs under the current program model. Table 6.1, as previously mentioned, provides cost estimates of Riverside's labor force attachment model. For illustrative purposes, it is assumed that these estimates represent simulation predictions of the costs of an LFA E&T approach.

A comparison of the two tables indicates that costs per case could be cut by more than half by shifting from the HCD approach to an LFA approach (from $2,990 to $1,163). A comparison of Tables 6.1 and 6.4 further suggests that although numerous factors cause costs to vary between the two program models, the key reason the LFA approach is less expensive than the HCD model is that it makes much less use of basic education. Under the LFA approach, only 2 percent of the cases assigned to the program participate in this activity. Under the HCD model, in contrast, over half the cases assigned to the program participate in basic education. Moreover, on average, they remain in basic education for nearly seven months, more than one and a half months longer than under the LFA approach.

The examples presented above demonstrate that while a sensitivity test is usually easy to conduct, it can be a powerful tool. As mentioned in chapter 5, simulation tests should be conducted whenever uncertainty exists concerning predictions (such as predictions of unit costs and participation rates) that are required in costing out a not-yet-implemented E&T program. Such tests help indicate whether poor predictions are likely to result in large errors in the cost estimates. Perhaps more important, sensitivity tests can be used to examine the cost implications of numerous alternative policy choices, and this can be done in the context of either an ongoing program or a proposed program. Even when an ongoing program is being substantially modified, it is often unnecessary to treat it as an entirely new program and, hence, conduct a cost analysis that requires use of the rather elaborate procedures described in chapter 5. A sensitivity test of the current program can frequently be used instead.

6.2 Bids for Program Components by Community-Based Organizations

E&T program agencies have frequently "farmed out" the actual operation of certain program components — for example, vocational training and day care — to outside organizations. Since the passage of the 1996 federal welfare law, welfare agencies have increasingly encouraged community-based organizations (CBOs) to bid on the components of welfare-to-work programs.

Table 6.4

ESTIMATING THE COSTS OF AN ONGOING PROGRAM
Riverside's Human Capital Development Approach

Step 1 List Program Components	Step 2 Unit Cost Estimates of Program Components	Step 3 Select the Analysis Sample for Steps 4 and 5 [a] — Step 4 Participation Rate [b]	Step 3 — Step 5 Average Length of Stay [c]	Step 6 Gross Cost per Referred Case per Program Component	Step 7 Total Gross Cost per Referred Case
PROGRAM ACTIVITIES					
Orientation and appraisal					
Welfare department	$ 79	1.20	1 session	$ 96	
Non-welfare department	$ 0	1.20	1 session	$ 0	
Formal assessment					
Welfare department	$ 535	0.02	1 session	$ 11	
Non-welfare department	$ 0	0.02	1 session	$ 0	
Job search					
Welfare department	$ 682	0.34	2.4 months	$ 559	
Non-welfare department	$ 0	0.34	2.4 months	$ 0	
Basic education					
Welfare department	$ 229	0.55	7.0 months	$ 872	
Non-welfare department	$ 274 [d]	0.55	7.0 months	$ 1,042	
Vocational training					
Welfare department	$ 110	0.04	7.8 months	$ 37	
Non-welfare department	$ 422 [e]	0.04	7.8 months	$ 142	
SUPPORT SERVICES					
Child care					
Welfare department	$ 143	0.24	4.5 months	$ 157	
Non-welfare department	$ 0	0.24	4.5 months	$ 0	
Transportation					
Welfare department	$ 23	0.60	4.6 months	$ 63	
Non-welfare department	$ 0	0.60	4.6 months	$ 0	
Ancillary services					
Welfare department	$ 22	0.28	1.6 months	$ 10	
Non-welfare department	$ 0	0.28	1.6 months	$ 0	
Total gross cost per referred case				$ 2,990	

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: Rounding may cause slight discrepancies in calculating sums.

a. The data on participation rates (step 4) and average length of participation (step 5) were obtained from a sample of 435 cases that were assigned to Riverside's HCD program.

b. The percentage of the analysis sample participating in each activity and receiving each service within two years of attending orientation.

c. Average months participating in each program activity and receiving each support service per participant within two years of attending orientation. Estimates are based on only those who participated in the activity or received the service.

d. $3.64 per hour for 75 hours of basic education.

e. $4.78 per hour for 88 hours of vocational training.

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With small modifications, the first six of the nine steps that were developed in chapter 5 for costing out a not-yet-implemented welfare-to-work program provide a useful framework that can be used by both program agencies in writing requests for bids and CBOs in responding to these requests. CBOs should find the framework helpful in developing a budget for their bid. Moreover, by requiring CBOs to use the framework, program agencies can help ensure that the bids they receive will be more uniform and, consequently, more readily compared.

The remainder of this section describes the six steps and suggests how each one can be used in the bidding process.

Step 1. Develop a Flow Diagram

The program agency should include a detailed flow diagram of the overall program in its request for bids so that potential bidders will know how the component on which they may bid fits. (See Figures 4.1 and 4.2 for illustrations of flow diagrams.)

Step 2. Predict Total Program Referrals

The request for bids should include an estimate of the total number of cases that will be referred to the program during the 12 months after the contract with the successful bidder begins. Bids should be based on these cases and on this time frame.

Step 3. Predict the Assignment Rate for the Program Component

The request for bids should indicate the fraction of those cases referred to the program (see step 2) that will be assigned the program component for which bids are being solicited. If some cases will be assigned to a program component more than once during the 12-month period, they should be counted in the numerator of the assignment rate once for each time they are assigned.

Step 4. Predict the Participation Rate for the Program Component

The request for bids should predict the fraction of those cases that are assigned to the program component that are likely to actually participate in the activity. The techniques suggested in chapter 5 can be used to obtain this prediction. If bidders believe that the actual participation rate will be smaller or larger than that suggested in the request for bids, they should indicate so in their bid and explain why. A CBO that is bidding on a job club, for example, may plan to make special efforts to encourage those assigned to job clubs to participate.

Step 5. Predict the Average Length of Participation

The request for bids should contain a prediction of the average length of time that participating cases will continue to participate in the program component. The techniques suggested in chapter 5 can be used for deriving this prediction. CBOs should be invited to suggest an alternative prediction in their bids and to state the reasons why this alter-

native should be used in estimating costs. For example, bidders on basic education or vocational training may plan on making special efforts to discourage participants from dropping out. Note that for certain program components, such as child care, some cases will continue to participate for more than 12 months. Nonetheless, the length of participation averages should be based on a 12-month period so that the budgets submitted by bidders pertain to a year.

Step 6. Estimate Unit Costs

The request for bids should require bidders to provide an estimate of the unit costs of providing the service for which they are bidding. This estimate, which should use a time unit that is consistent with that used in step 5, can be based on the group cost approach described in chapter 5 and should be justified in detail. This will be a key part of the bid.

Once the six steps are completed, bidders can then determine the number of cases that will participate in the program component by making the following computation:

step 2 x step 3 x step 4

Bidders can obtain an estimate of costs per participant by making the following computation:

step 5 x step 6

Total costs for the program component can then be computed by multiplying the predicted number of participants by the estimate of costs per participant.

6.3 Developing a Program Budget

Prior to implementing a new employment and training program, it is necessary to develop a program budget that indicates the projected expenditures for the program period (usually one year). If unit costs for the new program are estimated with data from the sites adopting the new program, it is usually relatively simple to develop a program budget, as the required information on the cost items that must be included in a program budget — for example, salaries paid to classroom teachers, salaries paid to support staff, rent for classrooms, equipment costs, and so forth — is typically now available.

e.g.

How might a program budget be developed as part of the same process as estimating unit costs? Recall the example used in chapter 5 to describe how the program unit approach could be used to forecast the unit cost of a job club. In that example, it was assumed that the job club would meet for four hours a day over a three-week period, that 10 people would be enrolled in each job club, and that 1,000 people would participate during a year. Consequently, about 100 job clubs would be run over the year, with two initiated each week, and, because each club lasts three weeks, six would need to operate at any point in time. If three classes operated in the morning and three in the afternoon, three classrooms would be required.

Before this information can be used to develop a program budget, a number of rather detailed questions first need to be answered.

- Can an instructor conduct one class in the morning and another in the afternoon so that only three instructors would be required? Or would preparation time be required? If so, how much? Would instructors also be responsible for following up with those placed (or not placed) by the job club? If so, the number of required instructors would obviously increase.
- If instructors are not responsible for follow-up, who would be and how much of their time would be required? For example, case managers might be used.
- How much case management time would be required for outreach and tracking (and, possibly, follow-up)?
- How much supervisory time would be required? How much support staff time would be required? Is there a standard ratio, perhaps specified by civil service regulations, that can be used for determining these requirements?
- Would all 10 students in a classroom need telephones at once for calling prospective employers, or would they alternate?
- What other equipment or supplies would be needed?

Once these and other relevant questions are answered, a similar process can be followed for each of the other planned program activities and services. Then, the program budget itself can be readily developed. An illustrative prototype of such a budget appears in Table 6.5.

Table 6.5

PROGRAM BUDGET PROTOTYPE	
Instructors	
Number x salary and fringes per instructor	$_____
Supervisors	
Number x salary and fringes per supervisor	$_____
Support staff	
Number x salary and fringes per support staff person	$_____
Case managers	
Number x salary and fringes per case manager	$_____
Classroom rental	
Number of rooms x rent per room	$_____
Phone banks	
Number of phones x cost per phone	$_____
Other equipment and supplies	
_____	$_____
_____	$_____
_____	$_____
Child care allowances	
Number of cases receiving allowance x allowance per case	$_____
Transportation allowances	
Number of cases receiving allowance x allowance per case	$_____

Appendix A

Selected Employment and Training Programs: Summary Descriptions and Main Evaluation Findings

- California's Greater Avenues for Independence (GAIN) Program
- Florida's Project Independence (PI)
- JOBSTART Demonstration
- Minnesota Family Investment Program (MFIP)
- National Evaluation of Welfare-to-Work Strategies
- National Job Training Partnership Act (JTPA) Study

1. California's Greater Avenues for Independence (GAIN) Program[1]

Summary. This evaluation, conducted during the early 1990s, tested the effects of a mandatory welfare-to-work program that provided basic education, job search, skills training, and work experience to AFDC recipients. GAIN's effects were estimated for a sample of 33,000 persons which included single parents (AFDC-FGs) and unemployed heads of two-parent households (AFDC-Us). The follow-up period covers five years.

Treatments Tested. Program group members were subject to the GAIN participation mandate and had access to case management and services. The control group was precluded from receiving services from the program, but could seek other services in the community on their own.

Target Population. AFDC recipients. Four of the six counties had resources to include all mandatory registrants; two focused on long-term recipients.

Number and Location of Sites. Six counties in California: Alameda, Butte, Los Angeles, Riverside, San Diego, and Tulare.

Major Findings. Effects varied by county.

1. Averaged across the six counties (with each county given equal weight), the GAIN program increased the percentage of AFDC-FGs who worked for pay during the five-year follow-up by 4.3 percentage points and raised average earnings by $2,853. Employment impacts generally decreased over time, whereas earnings gains were largest during years 4 and 5.
2. For AFDC-FGs, five-year AFDC savings averaged $1,496 across the six counties. Moreover, the percentage reduction in AFDC payments was somewhat larger during the last two years of follow-up than during years 1, 2, or 3.
3. Five-year earnings gains and AFDC savings for AFDC-FGs were achieved in all six counties, although for some effects and some counties the program–control group differences were small and not statistically significant.
4. Riverside's GAIN program produced the largest increase in total earnings ($5,038) for AFDC-FGs and the largest reduction in AFDC expenditures ($2,705).
5. GAIN increased the percentage of AFDC-Us who found employment by 6.3 percentage points over five years. Earnings gains totaled $1,906 over five years and reached a maximum in year 5.

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1. The information on the GAIN evaluation, JOBSTART Demonstration, and National JTPA Study is excerpted from David Greenberg and Mark Shroder, *The Digest of Social Experiments*, Second Edition (Washington, D.C.: The Urban Institute Press, 1997). Used by permission of The Urban Institute Press. For this guide, the GAIN findings have been updated to reflect a full five years of follow-up, as presented in The GAIN Evaluation, Working Paper 96.1, *Five-Year Impacts on Employment, Earnings, and AFDC Receipt*.

6. GAIN reduced AFDC payments to AFDC-Us by an average of $1,432 over five years. However, AFDC savings declined substantially during years 4 and 5.

Time Trends in Findings. The earnings impacts grew progressively stronger over time and were largest during years 4 and 5, whereas the impacts on AFDC receipt tended to level off over time.

Information Sources

Stephen Freedman, Daniel Friedlander, Winston Lin, and Amanda Schweder. The GAIN Evaluation. Working Paper 96.1. *Five-Year Impacts on Employment, Earnings, and AFDC Receipt* (New York: MDRC, 1996).

James Riccio, Daniel Friedlander, and Stephen Freedman. *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

2. Florida's Project Independence (PI)

Summary. PI is Florida's JOBS program. The program addressed the question of whether welfare costs can be reduced and the employment and income of welfare recipients increased. Subjects were followed for a two-year period.

Treatments Tested. Education and training, job search.

Target Population. Single-parent AFDC recipients and applicants.

Number and Location of Sites. Nine counties in Florida — Bay (Panama City), Broward (Fort Lauderdale), Dade (Miami), Duval (Jacksonville), Hillsborough (Tampa), Lee (Fort Myers), Orange (Orlando), Pinellas (St. Petersburg), and Volusia (Daytona Beach).

Major Findings

1. Sixty-four percent of program group members participated in employment-related activities through PI and other sources.
2. Forty percent of control group members participated in employment-related activities.
3. PI produced a substantial increase in the use of employment-related activities among program group members. Most of this increase was accounted for by their much greater use of relatively low-cost independent job search activities.
4. For the full sample, PI produced a modest decrease in program group members' AFDC and Food Stamp receipts — a decrease that persisted over the two-year follow-up period.

5. For the full sample, the modest earnings gains achieved by program group members in the first year of follow-up declined greatly in the second year. Overall, PI produced only a small increase in the average earnings of program group members over the two years.

6. PI produced AFDC savings for both sample members with preschool-age children and those with only older children.

7. From a benefit-cost standpoint, PI was most successful for the early group of AFDC applicants and recipients with no preschool-age children. For this group, the program produced budgetary savings and made program group members better off financially.

Information Source

James Kemple, Veronica Fellerath, and Daniel Friedlander. *Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program* (New York: MDRC, 1995).

3. JOBSTART Demonstration

Summary. This demonstration, conducted between 1985 and 1992, tested the effects of education, training, and support services on a large sample of economically disadvantaged school dropouts. Subjects were followed for four years.

Treatments Tested. Education and vocational training, support services, and job placement assistance. Support services included assistance with transportation, child care, counseling, and incentive payments.

Target Population. Economically disadvantaged school dropouts ages 17–21 who read below the eighth-grade level and were eligible for Job Training Partnership Act (JPTA) Title II-A programs or the Job Corps. Some sites screened out youth with problems that the program was not equipped to handle. These problems included emotional problems, drug and alcohol abuse, health problems, unstable living conditions, poor motivation, and those who were likely to prove dangerous or disruptive.

Number and Location of Sites. Thirteen sites — Buffalo and New York, New York; Atlanta, Georgia; Hartford, Connecticut; San Jose, Monterey Park, and Los Angeles, California; Chicago, Illinois; Pittsburgh, Pennsylvania; Dallas and Corpus Christi, Texas; Denver, Colorado; and Phoenix, Arizona.

Major Findings

1. Significantly more treatment group youths completed high school or its equivalent as compared to the control group (42 percent versus 28.6 percent). This impact was fairly large for all subgroups studied.

2. Employment was significantly greater for the control group in the first year of follow-up. In the second year, significantly more treatment group youths were employed. There were no significant differences in the third and fourth years regarding this variable.

3. Similarly, control group members earned more in the first two years after follow-up, whereas the treatment group earned more in the third and fourth years. This finding was statistically significant only for year one.

4. Few significant findings are found in subgroup analyses regarding employment. Trends are similar to those for the full sample.

5. For women who were not custodial mothers when the program started, there was a consistent pattern of reductions in AFDC receipt and payments, and many of these impacts were statistically significant. However, for women who were custodial mothers, JOBSTART significantly increased child bearing and had no impacts on AFDC receipt.

6. There is some indication that JOBSTART led to a reduction in criminal activity (arrests and drug use), although impacts are generally not significant.

7. The San Jose site had higher earnings impacts than any other site. This finding was significant at the .05 level. The reasons for this are unclear. At the San Jose site, training and placement efforts were closely linked to the labor market, education and training efforts were coordinated, and the program had a clear organizational mission. Any or all of these factors may have affected program impacts.

Time Trends in Findings. Treatment group payoffs did not usually occur until after year 2.

Information Sources

George Cave, Fred Doolittle, Hans Bos, and Cyril Toussaint. *JOBSTART: Final Report on a Program for School Dropouts* (New York: MDRC, 1993).

George Cave and Fred Doolittle. *Assessing JOBSTART: Interim Impacts of a Program for School Dropouts* (New York: MDRC, 1991).

4. Minnesota Family Investment Program (MFIP)

Summary. MFIP was implemented on a field trial basis in three urban counties and four rural counties to test financial incentives and welfare-to-work mandates for applicants and recipients.

Treatment Tested. Financial incentives, mandatory employment-related activities, direct child care payments, and simplification of public assistance rules.

Target Population. AFDC applicants and recipients.

Number and Location of Sites. Three urban counties — Hennepin, Anoka, and Dakota; four rural counties: Mille Lacs, Morrison, Sherburne, and Todd.

Major Findings

1. For single-parent, long-term recipients in urban areas, MFIP substantially increased employment and earnings during the first 18 months.
2. MFIP substantially reduced poverty for long-term, single-parent recipients in urban areas by increasing their earnings and limiting the reduction in their welfare benefits (compared with AFDC) when they worked.
3. It is MFIP's combination of financial incentives and mandatory employment-focused activities that achieved the goals of increased employment and reduced poverty.
4. For applicants in urban areas, MFIP produced a modest increase in employment and no increase in earnings during the first 18 months, and it increased the payout of welfare benefits.
5. MFIP increased income and reduced poverty among single-parent applicants. In contrast to long-term recipients, applicants' increased income came entirely from the increase in welfare payments to applicants who worked.
6. MFIP produced no sustained increase in employment or earnings among long-term recipients in rural areas, but it did increase welfare receipt and reduce poverty.

Information Source

Cynthia Miller, Virginia Knox, Patricia Auspos, Jo Anna Hunter-Manns, and Alan Orenstein. *Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program* (New York: MDRC, 1997).

5. National Evaluation of Welfare-to-Work Strategies[2]

Summary. MDRC is in the midst of the most comprehensive national evaluation of welfare-to-work programs ever undertaken — the National Evaluation of Welfare-to-Work Strategies. The study encompasses 11 programs in seven sites and 55,000 sample members.

Treatment Tested. In three of the program sites (Atlanta, Georgia; Grand Rapids, Michigan; and Riverside, California), the evaluation measures the effectiveness of two alternative employment preparation strategies: a human capital development approach (HCD), in which individuals who could potentially benefit from education and training

2. Formerly known as the JOBS Evaluation.

are provided with these services before they seek work, under the theory that they will then be able to get better jobs, and a labor force attachment approach (LFA), in which individuals are encouraged to gain quick entry into the labor market so that they can build up their work habits and skills and advance themselves on the job. In a fourth site (Columbus, Ohio), the evaluation is measuring the effectiveness of a traditional case management approach, in which different case workers handle income maintenance and welfare-to-work case management, as opposed to an integrated case management approach, in which one worker handles both functions. The evaluation also tests the effectiveness of welfare-to-work programs in Detroit, Michigan; Oklahoma City, Oklahoma; and Portland, Oregon.

Target Population. AFDC recipients and approved applicants in six sites; AFDC applicants who were not yet approved for welfare in Oklahoma City.

Number and Location of Sites. Seven sites: Atlanta, Georgia; Grand Rapids, Michigan; Riverside, California; Columbus, Ohio; Detroit, Michigan; Oklahoma City, Oklahoma; and Portland, Oregon.

Major Findings

Over the last seven years, this project has provided support for 20 major books, reports, and papers. Presented below is a summary of findings from two of the most recent reports. The first report presents implementation, participation patterns, costs, and two-year employment and earnings impacts for the LFA and HCD programs in Atlanta, Grand Rapids, and Riverside. The second report presents implementation, participation patterns, costs, and two-year employment and earnings impacts for Portland's program.

1. Both the LFA and HCD programs increased individuals' two-year cumulative employment and earnings. On average, one out of every five welfare recipients who normally would not have worked in an unsubsidized job during the two-year follow-up period did so as a result of the LFA programs. Two-year earnings were increased by more than $1,000 per average LFA sample member. The HCD programs in two of the three sites led to small two-year increases in earnings and employment.

2. The cumulative employment and earnings impacts over the two-year period were smaller for the HCD programs than for the LFA programs.

3. Both the LFA and HCD programs reduced welfare expenditures within the two-year follow-up period. Relative to the total welfare payments that the control groups received over the two years, the LFA and HCD programs reduced welfare expenditures between 6 and 18 percent.

4. The Portland program substantially increased employment and produced unusually large increases in earnings. The program raised employment levels by 11 percentage points over two years (relative to the control group). In addition, two-year earnings were increased by over $1,800 per sample member, a 35 percent increase over the control group's earnings.

5. Unlike many programs that produce immediate impacts on employment and earnings, the Portland program increased job quality. At the end of two years, the program increased the proportion of people working at full-time jobs by 13 percentage points and, among those employed, increased average hourly pay by $0.86.
6. The program reduced welfare expenditures by 17 percent over the two-year follow-up period.
7. Portland's impacts were widespread: both recipients with relatively few barriers to employment and those typically considered very hard to place achieved employment and earnings gains and AFDC reductions. Few other programs have attained such consistent impacts.

Information Sources

Gayle Hamilton, Thomas Brock, Mary Farrell, Daniel Friedlander, and Kristen Harknett. *National Evaluation of Welfare-to-Work Strategies: Evaluating Two Welfare-to-Work Program Approaches – Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Sites* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1997).

Susan Scrivener, Gayle Hamilton, Mary Farrell, Stephen Freedman, Daniel Friedlander, Marisa Mitchell, Jodi Nudelman, and Christine Schwartz. *National Evaluation of Welfare-to-Work Strategies: Implementation, Participation Patterns, Costs, and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1998).

6. National Job Training Partnership Act (JTPA) Study

Summary. This evaluation, conducted from 1987 to 1994, tested the effects of the Job Training Partnership Act (JTPA) Title II program's employment and training services on a large sample of economically disadvantaged adults and youths. Subjects were followed for 30 months.

Treatments Tested. Access to Title II services under the JTPA. Participants were divided into three groups by local staff according to which services were deemed appropriate. They were then randomly assigned to a treatment or control group for each service strategy. Specific services varied widely across sites, but could include the services shown in Table A.1.

Table A.1

JTPA SERVICES			
	Service Strategy		
Specific Program Service	Classroom Training Group	On-the-Job Training (OJT)/Job Search Assistance Group	Other Activities Group
Classroom training in occupational skills	Yes	No	Yes
OJT	No	Yes	Yes
Job search assistance	Yes	Yes	Yes
Basic education	Yes	Yes	Yes
Work experience	Yes	Yes	Yes
Miscellaneous	Yes	Yes	Yes

Target Population. Eligible JTPA Title-II adults and out-of-school youth. The study focused on four subgroups: adult women; adult men; female out-of-school youth; and male out-of-school youth.

Number and Location of Sites. Sixteen sites throughout the United States: Fort Wayne, Indiana; Coosa Valley, Georgia; Corpus Christi, Texas; Jackson, Mississippi; Providence, Rhode Island; Springfield, Missouri; Jersey City, New Jersey; Marion, Ohio; Oakland, California; Omaha, Nebraska; Larimer County, Colorado; Heartland, Florida; Butte, Montana; Decatur, Illinois; Cedar Rapids, Iowa; and Northwest, Minnesota.

Major Findings. Because the control group was able to receive employment and training services from non-JTPA providers, impacts reflect the incremental effect of JTPA services beyond what sample members could have accomplished without access to JTPA. Impacts were estimated separately by subgroups: adult men; adult women; female youth; male youth, nonarrestees; and male youth, arrestees.

Adults

1. The treatment group received significantly ($p = .01$) more employment and training services than did the control group; on average, men received 169 more hours of service and women received 136 more hours.
2. For adult women, average earnings over the 30-month period following random assignment were $1,176 (9.6 percent) greater for the treatment group than the control group. This is significant at the .01 level. For men, earnings were $978 (5.3 percent) greater for the treatment group. This is significant at the .10 level.

3. Earnings gains came more from an increase in hours worked (an employment effect) than from an increase in average hourly earnings (a wage effect). This was especially true for women.

4. JTPA resulted in a substantial and statistically significant impact on the attainment of a high school credential (diploma or its equivalent) for adult female school dropouts. The findings for adult males were also positive, although not statistically significant.

5. The greatest earnings impact was estimated for women in the OJT/JSA and other activities subgroups.

6. For adult women, there was no significant program impact on Aid to Families with Dependent Children (AFDC) or Food Stamp receipt. For men, there was a small, but significant, *increase* in AFDC receipt for the treatment group.

Youth

1. JTPA resulted in a significant increase in the amount of employment and training services for all categories of youth. (Female youth in the treatment group received, on average, 182 more hours than their control group counterparts; male youth nonarrestees received 175 more hours; and male youth who had a prior arrest [arrestees] received 127 more hours.)

2. There were no significant treatment–control group differences for the quarterly earnings of female youth and male youth nonarrestees. For male youth arrestees, there was a great discrepancy between survey data and data using unemployment wage records. The former suggests significantly less earnings for the treatment group. The wage record data suggest no significant treatment–control group difference.

3. JTPA had a significant positive effect on the attainment of a high school credential for female youth (7.7 percentage points more treatment group females, compared to their control group counterparts, had a high school diploma or GED 30 months after random assignment), but not for male youth.

4. No significant treatment–control group differences were found in welfare receipt for male or female youth.

Time Trend in Findings. There was a gradual increase in the earnings of all adult participants and youth nonarrestees — treatment and control group — over time.

Information Sources

Larry Orr, Howard Bloom, Stephen Bell, Fred Doolittle, Winston Lin, and George Cave. *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study* (Washington, D.C.: The Urban Institute Press, 1996).

James Kemple, Fred Doolittle, and John Wallace. *The National JTPA Study: Site Characteristics and Participation Patterns* (New York: MDRC, 1993).

Appendix B

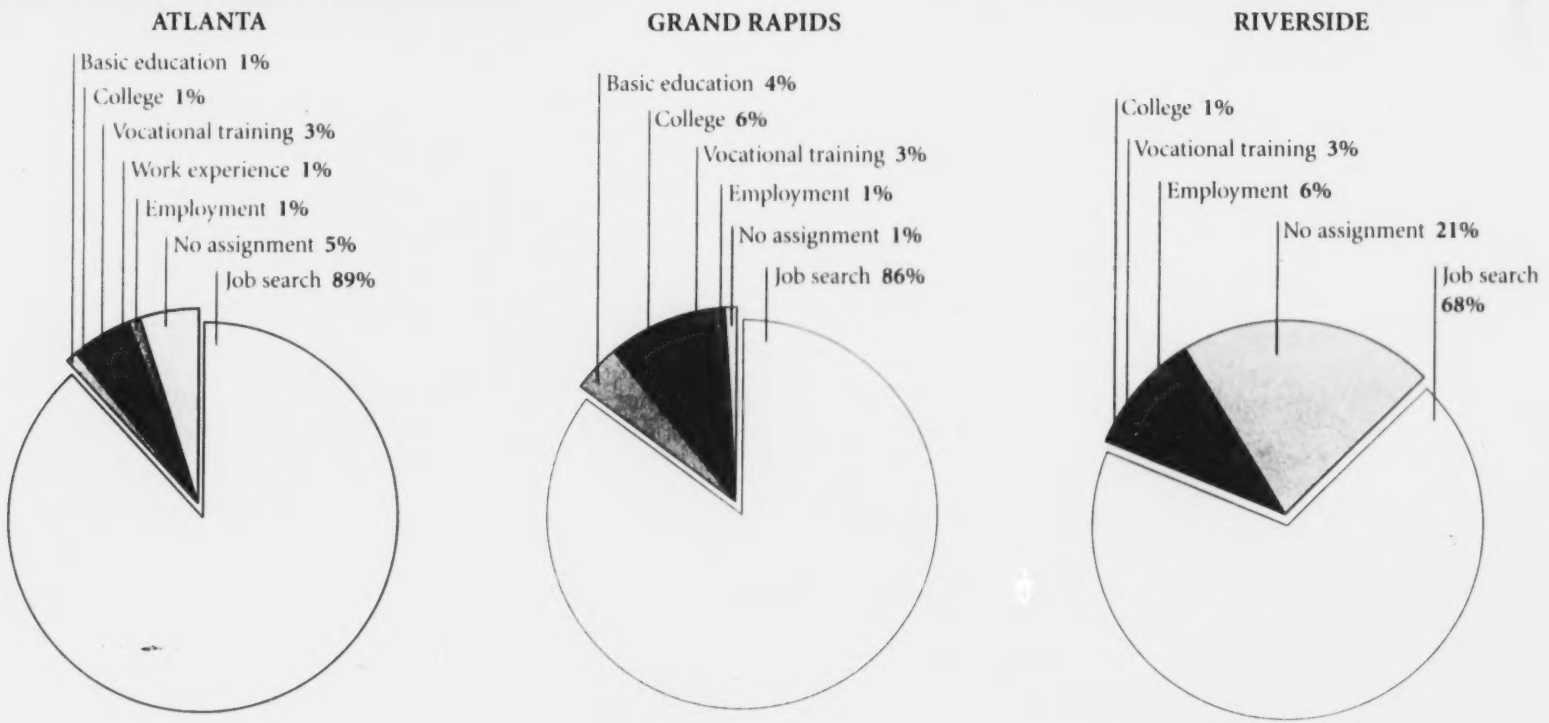
Assignment Rates for Employment and Training Activities

- National Evaluation of Welfare-to-Work Strategies

Figure B.1

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Assignment Patterns Within a Two-Year Follow-Up Period, by Site:
Labor Force Attachment Approach

Activities to which individuals were initially assigned:



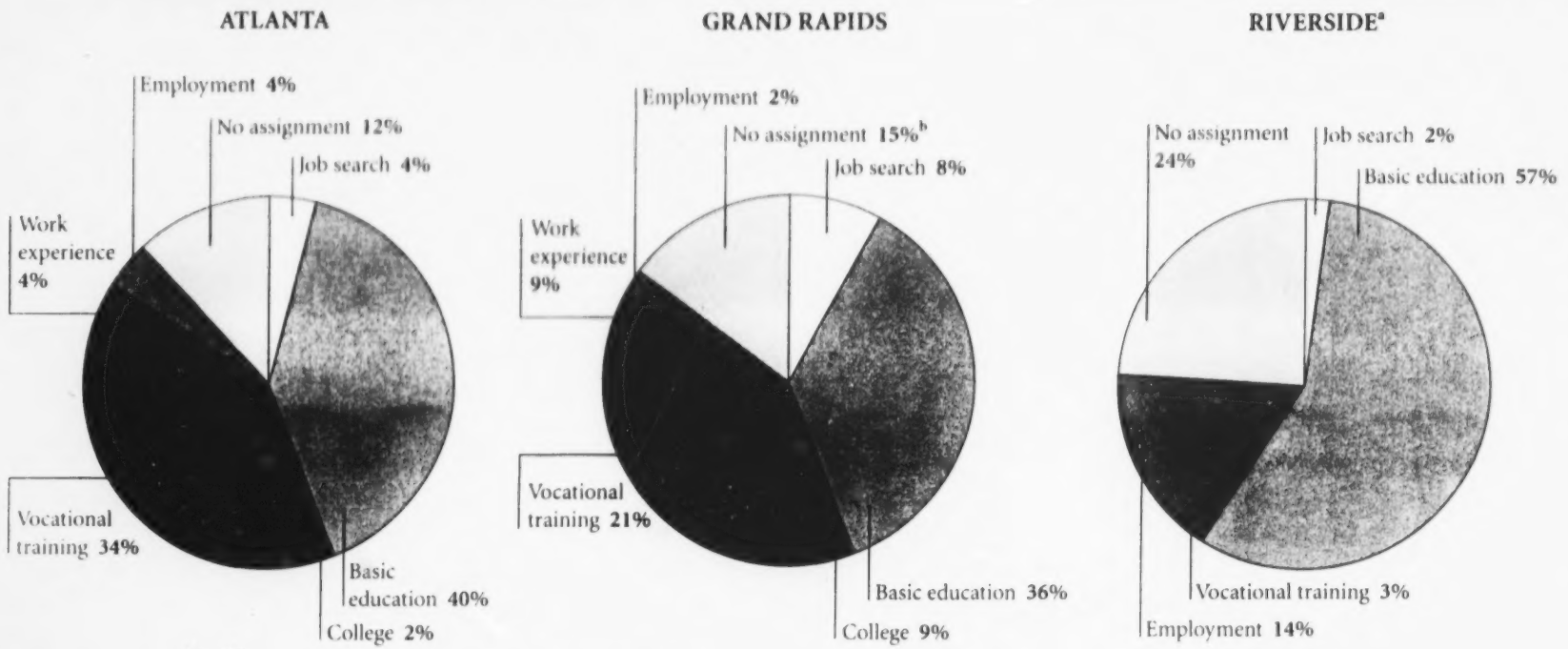
SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: The designated activities are those to which individuals were initially assigned or in which they were allowed to continue if they had begun the activity prior to entering the program. Numbers may not add up to 100% because of rounding.

Figure B.2

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Assignment Patterns Within a Two-Year Follow-Up Period, by Site:
Human Capital Development Approach

Activities to which individuals were initially assigned:



SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: The designated activities are those to which individuals were initially assigned or in which they were allowed to continue if they had begun the activity prior to entering the program. Numbers may not add up to 100% because of rounding.

a. Includes only individuals without a high school diploma or GED.

b. Includes many individuals who were initially assigned to a formal assessment and received no further assignments.

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Appendix C

Average Length of Stay in Employment and Training Activities

- National Evaluation of Welfare-to-Work Strategies
- California's Greater Avenues for Independence (GAIN) Program
- Florida's Project Independence (PI)

Table C.1

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Average Length of Stay in Employment and Training Activities Within Two Years After Orientation

	Atlanta		Grand Rapids		Riverside	
Activity	LFA	HCD	LFA	HCD	LFA	HCD[a]
Average number of months of participation in:						
Job search	3.1	3.1	2.2	2.4	2.3	2.4
Basic education	7.8	10.7	5.4	9.9	5.6	6.9
Post-secondary education	17.5	9.8	10.5	9.3	12.9	0.0
Vocational training	7.1	7.6	6.6	5.8	0.0	7.8
Work experience	6.6	8.6	4.8	3.5	5.7	0.0

SOURCES: Unpublished data based on MDRC calculations from a survey of clients administered approximately two years after orientation, adjusted using MDRC-collected case file data from the programs.

NOTES: As discussed in chapter 4, the Labor Force Attachment (LFA) strategy emphasized placing people into jobs quickly, whereas the Human Capital Development (HCD) strategy emphasized education and training as a precursor to employment.

a. The HCD sample for Riverside included only individuals without a high school diploma or GED.

Table C.2

CALIFORNIA'S GREATER AVENUES FOR INDEPENDENCE (GAIN) PROGRAM
Average Length of Stay in Employment and Training Activities
Two to Three Years After Orientation

	County					
Activity	**Alameda**	**Butte**	**Los Angeles**	**Riverside**	**San Diego**	**Tulare**
Average number of months of participation in:						
Job search	1.6	n/a	1.7	1.9	2.2	1.9
Adult Basic Education / General Educational Development (GED) preparation	7.9	n/a	9.9	4.6	5.0	9.0
English as a Second Language	12.5	n/a	8.1	4.6	5.0	10.3
Vocational training or post-secondary education	10.8	n/a	9.5	8.3	8.6	9.2
Unpaid work experience	3.3	n/a	—	—	1.5	2.9

SOURCE: James Riccio, Daniel Friedlander, and Stephen Freedman, *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

NOTES: Results shown are for single parents in the experimental (program) group who started specified activities within two to three years after orientation. Estimates include participation in GAIN and non-GAIN activities.

Where data are not applicable, dashes are used.

Where data are not available, n/a is used.

Table C.3

FLORIDA'S PROJECT INDEPENDENCE
Average Length of Stay in Employment and Training Activities Within Two Years After Random Assignment

Activity	Months
Average number of months of participation in:[a]	
Any independent job search or job club[b]	2.5
Independent job search	2.2
Job club	1.6
Any education or training[b]	9.0
Adult Basic Education / General Educational Development (GED) preparation	5.9
English as a Second Language	5.7
Vocational training or post-secondary education	8.8
On-the-job-training	6.1
Average months of participation[b]	6.7

SOURCE: James Kemple, Veronica Fellerath, and Daniel Friedlander, *Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program* (New York: MDRC, 1995).

NOTES: The results shown include participation in Project Independence and non-Project Independence activities.

a. Estimates were based only on individuals who participated in the specified activities.

b. Individuals could participate in more than one activity during the follow-up period; therefore, the sum of months in specific activities exceeds the number of months in the category.

Appendix D

Participation Rates for Employment and Training Activities

- National Evaluation of Welfare-to-Work Strategies
- California's Greater Avenues for Independence (GAIN) Program
- Minnesota Family Investment Program (MFIP)
- Florida's Project Independence (PI)

NOTE:

The definition of participation rate presented in chapter 5 is somewhat different from the definition used in the following tables, which are extracted from MDRC research results. However, the definition used in the tables is very similar to the one used in chapter 3. In chapter 5, "participation rate" is defined as the percentage of cases assigned to a program activity who participate in the activity. In the following tables, as well as in chapter 3, "participation rate" is defined as the percentage of cases referred to the program (not to a program activity) who participate in an activity. In case this appendix is used to cost out not-yet-implemented programs, as described in chapter 5, note that the values presented in the following tables approximate the assignment rate (step 3B) times the participation rate (step 4B) for cases that were referred to the programs.

Table D.1

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Participation Rates for Employment and Training Activities Within Two Years After Orientation

	Atlanta		Grand Rapids		Riverside	
Activity	LFA	HCD	LFA	HCD	LFA	HCD[a]
Of those who were referred to the program, percentage who ever participated in:						
Job search	62.0%	13.0%	46.9%	16.7%	45.0%	33.6%
Basic education	14.0	33.1	11.7	29.7	1.1	54.8
Post-secondary education	1.3	1.2	16.5	21.4	2.4	0.0
Vocational training	9.3	24.6	9.4	16.1	0.0	4.3
Work experience	14.4	7.0	8.8	12.0	1.7	0.0

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: As discussed in chapter 4, the Labor Force Attachment (LFA) strategy emphasized placing people into jobs quickly, whereas the Human Capital Development (HCD) strategy emphasized education and training as a precursor to employment.

a. The HCD sample for Riverside included only individuals without a high school diploma or GED.

Table D.2

CALIFORNIA'S GREATER AVENUES FOR INDEPENDENCE (GAIN) PROGRAM
Participation Rates for Employment and Training Activities
Two to Three Years After Orientation

	County				
Activity	**Alameda**	**Los Angeles**	**Riverside**	**San Diego**	**Tulare**
Ever participated in:					
Job search	32.2%	14.0%	38.0%	34.0%	24.2%
Adult Basic Education / General Educational Development (GED) preparation	42.3	27.2	20.7	18.1	36.9
English as a Second Language	3.2	13.3	6.7	5.2	6.7
Vocational training or post-secondary education	28.4	13.5	26.8	34.8	28.6
Unpaid work experience	2.4	0.0	0.0	2.0	0.7
On-the-job-training	0.0	0.0	0.8	3.7	0.3

SOURCE: James Riccio, Daniel Friedlander, and Stephen Freedman, *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

NOTES: For Butte County, the program's sixth site, no participation data were available.

Results shown are for single parents in the experimental (program) group only. Estimates include participation in GAIN and non-GAIN activities.

Table D.3

MINNESOTA FAMILY INVESTMENT PROGRAM (MFIP)
Participation Rates for Employment and Training Activities, in Urban Counties, Within One Year After Random Assignment

Activity	MFIP Full Program	MFIP Financial Incentives Only[a]
Ever participated in:		
Career workshop	29.6%	21.2%
Job search[b]	41.4	11.5
Job search class	19.9	8.7
Job search club	12.8	2.5
Individual job search	29.0	3.8
Basic education	11.1	16.0
Post-secondary education[c]	9.8	13.3
Vocational training[d]	6.9	5.5
Work experience	0.8	0.0
English as a Second Language	2.8	3.8
Other	2.7	1.5
Ever participated in any employment-related activity[b]	58.7	44.9

SOURCE: MDRC calculations from a survey of clients administered approximately one year after random assignment, as reported in Cynthia Miller, Virginia Knox, Patricia Auspos, Jo Anna Hunter-Manns, and Alan Orenstein, *Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program* (New York: MDRC, 1997).

NOTES: a. For research purposes, some welfare recipients were subject only to MFIP's financial incentives and not to its mandatory participation in employment and training activities by long-term recipients (although they could volunteer for such services). This group is labeled "MFIP Financial Incentives Only." The sample includes single-parent long-term welfare recipients only.

b. Individuals could participate in more than one activity during the follow-up period; therefore, the sum of percentages in specific activities exceeds the category percentage.

c. Post-secondary education is defined as courses for college credit at a two-year or four-year college.

d. Vocational training is defined as training for a specific job, trade, or occupation that does not lead to college credit. It does not include on-the-job training or unpaid work experience.

Table D.4

FLORIDA'S PROJECT INDEPENDENCE
Participation Rates for Employment and Training Activities
Within Two Years After Random Assignment

Activity	Percentage
Ever participated in:	
Any independent job search or job club[a]	42.7%
Independent job search	41.0
Job club	13.2
Any education or training[a,b]	41.5
Adult Basic Education / General Educational Development (GED) preparation	12.1
English as a Second Language	4.6
Vocational training or post-secondary education	29.2
On-the-job-training	4.0
Ever participated in any employment-related activity[a]	63.9

SOURCE: James Kemple, Veronica Fellerath, and Daniel Friedlander, *Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program* (New York: MDRC, 1995).

NOTES: The results shown include participation in Project Independence and non-Project Independence activities.

a. Individuals could participate in more than one activity during the follow-up period; therefore, the sum of percentages in specific activities exceeds the category percentage.

b. Includes self-initiated basic education, vocational training, or post-secondary education.

Appendix E

Unit Costs for Employment and Training Activities

- National Evaluation of Welfare-to-Work Strategies
- California's Greater Avenues for Independence (GAIN) Program
- Florida's Project Independence (PI)
- National Job Training Partnership Act (JTPA) Study
- JOBSTART Demonstration

Table E.1

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Unit Costs for Employment and Training Activities
(in 1993 Dollars)

	Labor Force Attachment Approach (LFA)		
	Welfare Dept. Unit Cost[a]	Non-Welfare Dept. Unit Cost	
Activity and Site	Average per Participant-Month	Average per Participant-Month	Average per ADA[b]
Orientation and appraisal			
Atlanta	$ 65[c]	—	—
Grand Rapids	16[c]	—	—
Riverside	79[c]	—	—
Formal assessment			
Atlanta	—	—	—
Grand Rapids	355	—	—
Riverside	535[c]	—	—
Job search[d]			
Atlanta	$374	$ 55	—
Grand Rapids	233	413[c]	—
Riverside	682	—	—
Basic education[e,f]			
Atlanta	$104	—	$1,502
Grand Rapids	119	—	3,008
Riverside	229	—	2,100
Post-secondary education[e]			
Atlanta	$ 66	—	$4,263
Grand Rapids	88	—	4,389
Riverside	110	—	3,008
Vocational training[e]			
Atlanta	$138	—	$3,449
Grand Rapids	99	—	3,691
Riverside	110	—	2,604
Work experience			
Atlanta	$150	—	—
Grand Rapids	216	—	—
Riverside	514	—	—

(continued)

Table E.1 (continued)

Activity and Site	Human Capital Development Approach (HCD)		
	Welfare Dept. Unit Cost[a]	Non-Welfare Dept. Unit Cost	
	Average per Participant-Month	Average per Participant-Month	Average per ADA[b]
Orientation and appraisal			
Atlanta	$ 65[c]	—	—
Grand Rapids	16[c]	—	—
Riverside	79[c]	—	—
Formal assessment			
Atlanta	—	—	—
Grand Rapids	355	—	—
Riverside	535[c]	—	—
Job search[d]			
Atlanta	$416	$ 55	—
Grand Rapids	233	377[g]	—
Riverside	682	—	—
Basic education[e,f]			
Atlanta	$ 89	—	$1,460
Grand Rapids	119	—	2,977
Riverside	229	—	1,911
Post secondary education[e]			
Atlanta	$ 85	—	$3,806
Grand Rapids	88	—	4,316
Riverside	110	—	2,966
Vocational training[e]			
Atlanta	$126	—	$3,418
Grand Rapids	99	—	3,413
Riverside	110	—	2,510
Work experience			
Atlanta	$182	—	—
Grand Rapids	216	—	—
Riverside	514	—	—

SOURCE: Gayle Hamilton et al., *National Evaluation of Welfare-to-Work Strategies*, 1997.

NOTES: Welfare department costs include the costs of monitoring and sanctioning non-compliant participants.

The following calculation will adjust for inflation and express 1993 dollars in 1997 dollars. Adjustment factor: 1.0984 (based on the GDP deflator, which is based on the U.S. government fiscal year). 1997 dollars = 1993 dollars x adjustment factor. For example, orientation in Atlanta (LFA): $65 x 1.0984 = $71.40. Expressed in 1997 dollars, one session of orientation cost $71.

Where data are not applicable, dashes are used.

(continued)

Table E.1 (continued)

a. In general, Riverside's welfare department unit costs were the highest of the three, in part because Riverside had relatively high overhead costs and job developers on site, who canvassed the local job market for employment opportunities for participants.

b. One ADA refers to one unit of Average Daily Attendance, an attendance measure used by California community colleges and adult schools, and is defined as a block of 525 hours of attendance. For comparison reasons, educational activities of all three sites are expressed per ADA.

c. Cost per session for one participant.

d. Job search costs per participant incurred by the welfare departments tended to be higher than the education and training unit costs because the welfare department typically paid for case management costs for clients enrolled in job search activities as well as for the direct expenses of providing job search services. The exception was Grand Rapids, where job search services were provided and paid for by the local community education center.

e. The education and vocational training unit costs incurred by the welfare department reflect case management costs only. Non-welfare agencies paid for the education and training services.

f. Riverside made incentive payments to the basic education providers.

g. The estimated unit cost to Grand Rapids non-welfare agencies was $921 per participant.

Table E.2

CALIFORNIA'S GREATER AVENUES FOR INDEPENDENCE (GAIN) PROGRAM
Unit Costs for Employment and Training Activities
(in 1993 Dollars)

Activity and County	Welfare Dept. Unit Cost: Average per Participant-Month	Non-Welfare Dept. Unit Cost: Average per ADA[a]
Orientation[b]		
Alameda	$ 515[c]	—
Butte	345[c]	—
Los Angeles	520[c]	—
Riverside	407[c]	—
San Diego	295[c]	—
Tulare	342[c]	—
Job search activities[d]		
Alameda	$1,120	—
Butte	607	—
Los Angeles	556	—
Riverside	568	—
San Diego	537	—
Tulare	667	—
Adult Basic Education / General Educational Development (GED) / English as a Second Language[e]		
Alameda	$ 180	$2,109
Butte	112	2,106
Los Angeles	288	2,131
Riverside	141	2,160
San Diego	243	2,153
Tulare	94	2,101
Vocational training or post-secondary education[f]		
Alameda	$ 104	$3,151
Butte	192	3,011
Los Angeles	162	3,257
Riverside	101	3,522
San Diego	82	3,252
Tulare	77	3,121

(continued)

Table E.2 (continued)

SOURCE: James Riccio, Daniel Friedlander, and Stephen Freedman, *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

NOTES: Welfare department costs include the costs of monitoring and sanctioning non-compliant participants.

The following calculation will adjust for inflation and express 1993 dollars in 1997 dollars. Adjustment factor: 1.0984 (based on the GDP deflator, which is based on the U.S. government fiscal year). 1997 dollars = 1993 dollars x adjustment factor. For example, orientation in Alameda: $515 x 1.0984 = $565.68. Expressed in 1997 dollars, one session of orientation cost $566.

Where data are not applicable, dashes are used.

a. One ADA refers to one unit of Average Daily Attendance, an attendance measure used by California community colleges and adult schools, and is defined as a block of 525 hours of attendance. For comparison reasons, educational activities of all three sites are expressed per ADA.

b. Los Angeles held a motivational training seminar, which was incorporated into its day-and-a-half-long orientation session. Alameda had an on-site day care center at the GAIN office for registrants attending a GAIN orientation and meeting with staff.

c. Cost per session for one participant.

d. Job search activities had the highest welfare department unit costs, reflecting the fact that they included the costs of both case management and providing the job search activities, such as job club sessions.

e. San Diego had extra on-site counselors in its learning labs for Adult Basic Education /GED and English as a Second Language participants.

f. Butte and Tulare had extra on-site counselors at some community colleges. Riverside made incentive payments to basic education providers.

Table E.3

FLORIDA'S PROJECT INDEPENDENCE
Unit Costs for Employment and Training Activities
(in 1993 Dollars)

Activity	Welfare Department Unit Cost: Average per Participant-Month	Non-Welfare Department Unit Cost: Average per Participant-Month	Non-Welfare Department Unit Cost: Average per FTE[a]
Orientation	$ 69[b]	n/a	n/a
Formal assessment	112	n/a	n/a
Independent job search	72	$ 72	n/a
Job club	226	226	n/a
Adult Basic Education / General Educational Development (GED) preparation	76	n/a	$2,688
English as a Second Language	76	n/a	2,688
Vocational training or post-secondary education	21	n/a	4,768[c]
On-the-job training	231	231	n/a
Unpaid work experience	30	30	n/a

SOURCE: James Kemple, Veronica Fellerath, and Daniel Friedlander, *Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program* (New York: MDRC, 1995).

NOTES: Welfare department costs include the costs of monitoring and sanctioning non-compliant participants.

The following calculation will adjust for inflation and will express 1993 dollars in 1997 dollars. Adjustment factor: 1.0984 (based on the GDP deflator, which is based on the U.S. government fiscal year). 1997 dollars = 1993 dollars x adjustment factor. For example, orientation: $69 x 1.0984 = $75.79. Expressed in 1997 dollars, one session of orientation cost $76.

Where data are not available, n/a is used.

a. One FTE (full-time equivalent student) represents the total number of scheduled hours for a student attending full-time for one academic year. For adult schools, vocational training centers, and non-credit courses at community colleges, one FTE equals 900 scheduled hours of class, which is equivalent to 180 days of five one-hour classes per day.

b. Cost per participant per session.

c. The average cost per FTE is a weighted average of the costs per FTE of vocational training centers and community colleges.

Table E.4

NATIONAL JOB TRAINING PARTNERSHIP ACT (JTPA) STUDY
Unit Costs for Employment and Training Activities
(in 1988 Dollars)

Activity	Service Provider Unit Cost: Average per Participant-Day	
	Adults	Youth
All sites[a]		
Orientation/intake/assessment	$159[b]	$166[b]
Classroom training in occupational skills	16	16
On-the-job-training	19	12
Job search	4	6
Adult Basic Education	17	11
Work experience	25	9

SOURCES: Unpublished data from the National JTPA Study, Abt Associates. Also, Larry L. Orr, Howard S. Bloom, Stephen H. Bell, Fred Doolittle, Winston Lin, and George Cave, *Does Job Training for the Disadvantaged Work? Evidence from the National JTPA Study* (Washington, D.C.: The Urban Institute Press, 1996).

NOTES: The figures shown are the cost per day enrolled in the activity, which may not equal the cost per day of active participation in the activity.

The following calculation will adjust for inflation and express 1988 dollars in 1997 dollars. Adjustment factor: 1.3138 (based on the GDP deflator, which is based on the U.S. government fiscal year). 1997 dollars = 1988 dollars x adjustment factor. For example, orientation for adults: $159 x 1.3138 = $208.89. Expressed in 1997 dollars, one session of orientation cost $209.

a. Weighted averages of all 16 sites.

b. Cost per participant per session.

Table E.5

JOBSTART DEMONSTRATION
Unit Costs for Employment and Training Activities
(in 1986 Dollars)

Activity and Site	Service Provider Unit Cost: Average per Month of Participation
Orientation	
Allentown, NY	$ 33
Atlanta Job Corps	195
Basic Skills Academy, NYC	439
Capitol Region Education Council (CREC), Hartford	291
Center for Employment Training (CET), San Jose	56
Chicago Commons	n/a
Connelley, Pittsburgh	14
East LA Skills Center	n/a
Emily Griffith Opportunity School (EGOS), Denver	62
Phoenix Job Corps	178
SER Corpus Christi, TX	64
El Centro, Dallas	n/a
LA Job Corps	364
Basic education[a]	
Allentown, NY	$ 113
Atlanta Job Corps	129
Basic Skills Academy, NYC	927
CREC, Hartford	525
CET, San Jose	16
Chicago Commons	1,724[b]
Connelley, Pittsburgh	661[b]
East LA Skills Center	15[c]
EGOS, Denver	63
Phoenix Job Corps	157
SER Corpus Christi, TX	642[b]
El Centro, Dallas	418
LA Job Corps	88
Life skills education	
Allentown, NY	$ 110
Atlanta Job Corps	69
Basic Skills Academy, NYC	244
CREC, Hartford	n/a
CET, San Jose	n/a
Chicago Commons	35[b]
Connelley, Pittsburgh	n/a
East LA Skills Center	n/a
EGOS, Denver	n/a
Phoenix Job Corps	57
SER Corpus Christi, TX	n/a
El Centro, Dallas	126
LA Job Corps	60

(continued)

Table E.5 (continued)

Activity and Site	Service Provider Unit Cost: Average per Month of Participation
Skills training[d]	
Allentown, NY	$ 529[b]
Atlanta Job Corps	202
Basic Skills Academy, NYC	1,965[b]
CREC, Hartford	2,135[b]
CET, San Jose	187
Chicago Commons	3,187[b]
Connelley, Pittsburgh	802[b]
East LA Skills Center	315
EGOS, Denver	59
Phoenix Job Corps	266
SER Corpus Christi, TX	541[b]
El Centro, Dallas	547
LA Job Corps	217
Job placement	
Allentown, NY	$ 48
Atlanta Job Corps	19
Basic Skills Academy, NYC	n/a
CREC, Hartford	n/a
CET, San Jose	56
Chicago Commons	285[b]
Connelley, Pittsburgh	345[b]
East LA Skills Center	7
EGOS, Denver	3
Phoenix Job Corps	30
SER Corpus Christi, TX	94[b]
El Centro, Dallas	297
LA Job Corps	534[b]

SOURCES: Unpublished data from the JOBSTART Demonstration. Also, George Cave and Fred Doolittle, *Assessing JOBSTART: Interim Impacts of a Program for School Dropouts* (New York: MDRC, 1991).

NOTES: Sites had different enrollment levels. For example, if the number of participants "on board" a program in a typical month is high relative to the number of program instructors, the total monthly instructional costs (and the corresponding overhead expenditures) will be spread over many people, lowering the average unit cost. Differences in wage scales further explain some of the variation in unit costs. The average hourly wage paid to instructors at SER Corpus Christi was about half the hourly rate received by teachers at the East LA Skills Center. EGOS, in Denver, a large public vocational school with more than 15,000 students, was able to spread personnel costs for instructors and overhead expenditures over many students. In contrast, the Basic Skills Academy, in New York City, had high unit costs because it enrolled only about half the number of students the school had the capacity to serve at any time.

The following calculation will adjust for inflation and express 1986 dollars in 1997 dollars. Adjustment factor: 1.3988 (based on the GDP deflator, which is based on the U.S. government fiscal year). 1997 dollars = 1986 dollars x adjustment factor. For example, orientation in Allentown: $33 x 1.3988 = $46.16. Expressed in 1997 dollars, one session of orientation cost $46.

Where data are not applicable, n/a is used.

(continued)

a. Education costs were especially low at CET, San Jose, in part because most of the hours that program participants spent in that site were in training classes, which included work on basic education skills. (Basic education that occurred in the context of occupational skills training was counted as skills training.)

b. Per person served.

c. Per hour.

d. Chicago Commons added a separate education class specifically for JOBSTART participants. Chicago Commons assigned two instructors to all training classes, an unusual practice among the JOBSTART sites, and this raised its unit cost per participant. Additionally, training classes operated on a fixed-cycle basis (dropouts within a cycle were usually not replaced with other students).

Appendix F

Program Effects on AFDC Receipt

- National Evaluation of Welfare-to-Work Strategies

Table F.1

NATIONAL EVALUATION OF WELFARE-TO-WORK STRATEGIES
Program Effects on AFDC Receipt Within a Two-Year Follow-Up Period

	Labor Force Attachment (LFA)						Human Capital Development (HCD)					
	Atlanta		Grand Rapids		Riverside		Atlanta		Grand Rapids		Riverside[a]	
Ever Received Any AFDC Payments (%)	Program Group	Control Group	Program Group	Control Group	Program Group	Control Group	Program Group	Control Group	Program Group	Control Group	Program Group	Control Group
Year 1 or 2	97.7%	98.1%	95.7%	97.4%	93.3%	93.4%	97.3%	98.1%	97.1%	97.4%	93.8%	93.9%
Year 1	97.4	97.8	95.1	97.1	92.7	92.9	97.2	97.8	96.9	97.1	93.1	93.4
Year 2	82.0	86.1	74.5	79.9	62.8	68.7	83.3	86.1	77.1	79.9	69.2	71.8
Quarter 1	98.3	98.3	97.7	98.1	96.4	96.5	98.2	98.3	97.7	98.1	96.4	96.6
Quarter 2	96.7	97.7	92.6	95.7	91.5	91.7	96.7	97.7	95.7	95.7	92.0	92.5
Quarter 3	91.7	93.6	83.5	89.8	80.5	83.8	92.9	93.6	88.1	89.8	81.4	86.2
Quarter 4	86.9	88.2	76.8	84.2	71.2	75.4	88.0	88.2	81.1	84.2	73.7	78.1
Quarter 5	81.9	85.1	71.7	79.3	63.6	69.6	83.4	85.1	76.3	79.3	68.1	72.4
Quarter 6	79.0	82.9	67.7	76.8	58.8	65.2	80.2	82.9	71.4	76.8	65.3	68.2
Quarter 7	75.3	79.6	63.5	71.6	55.3	61.4	77.0	79.6	67.2	71.6	61.1	64.2
Quarter 8	71.5	77.7	61.9	68.9	52.4	58.7	73.4	77.7	62.4	68.9	58.0	61.8
Quarter 9	68.4	74.8	58.1	65.1	50.0	55.9	70.7	74.8	58.8	65.1	54.9	58.9

SOURCE: Gayle Hamilton, Thomas Brock, Mary Farrell, Daniel Friedlander, and Kristen Harknett, *National Evaluation of Welfare-to-Work Strategies: Evaluating Two Welfare-to-Work Program Approaches — Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Sites* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1997).

NOTES: For all measures, the quarter of random assignment refers to the calendar quarter in which random assignment occurred. Because quarter 1, the quarter of random assignment, may contain some earnings and AFDC payments from the period prior to random assignment, it is excluded from follow-up measures. Thus, "year 1" is quarters 2 through 5, "year 2" is quarters 6 through 9, and so forth.

a. The HCD sample for Riverside included only individuals without a high school diploma or GED.

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Glossary

Aggregate program costs. Costs summed over all cases accepted into a voluntary E&T program or referred to a mandatory E&T program.

Assignment rate. The percentage of cases accepted by or referred to a program who are assigned to a particular program activity or receive a particular program support service.

Average costs. Costs per accepted or referred case.

Benefits. Effects of a program or policy that makes individuals better off (for example, an increase in earnings as a result of participating in an E&T program).

Comparison group. Cases that do not have access to the services provided by a program, but are otherwise eligible for the program. In many evaluations, these cases are compared to cases that are accepted or referred to the program.

Control group. Cases that, for purposes of evaluation, are randomly assigned to a group that is not allowed to receive program services, but would otherwise be eligible. These cases are compared to cases that are randomly assigned to a group that is allowed to receive program services.

Cost-benefit analysis. A comparison of a program's costs with its benefits.

Costs. Expenditures required to operate a program, including expenditures on staff; purchases of goods, services, office space, and equipment; vendor payments; and purchases of day care and transportation assistance.

Discounting. A procedure that uses an interest rate to compute the present value of a future stream of benefits and costs. The interest rate is used to adjust dollars that will be paid out or received in the future because they are valued less than dollars paid out or received in the present.

Employment subsidies. Payments made to employers who hire program participants.

Gross costs. The total costs necessary to run a program.

Inflation. A general increase in the price level over time.

Joint costs. Costs that result from using resources for multiple purposes.

Mandatory E&T program. An employment and training program in which people are required to participate in exchange for receiving benefits (e.g., welfare or unemployment compensation).

Marginal costs. Additional costs that result from serving one more case in a program or the cost savings that would result from serving one less case.

Net benefits. The benefits of a program *less* the costs of the program.

Net costs. Gross costs incurred by the program *less* cost savings attributable to the program.

Nonprogram employment and training costs. Employment and training costs that occur outside the program being analyzed.

No-show. A case that is assigned to a program activity, but does not show up.

Overhead costs. Costs not counted as part of staff personnel costs. Overhead costs *may* include costs associated with support staff, such as secretaries, and supervisors; fringe benefits; and the costs of various physical resources, such as computer systems, furniture, physical facilities, and telephones.

Overhead rate. Total annual expenditures divided by staff personnel costs.

Participation rate. For an ongoing program, the participation rate is the percentage of cases accepted by or referred to a program who participate in a particular program activity or receive a particular support service. For a not-yet-implemented program, the participation rate is the percentage of cases who are assigned to a particular program activity and actually participate in the activity.

Performance-based contract. Contract which states that all or, more often, part of the fees paid to a contractor depend on whether (and sometimes the extent to which) the contractor exceeds or falls below certain goals or standards.

Personnel costs. Costs that accrue to the line staff who are directly involved in various E&T activities.

Present value. The value today of a future stream of benefits or costs.

Price index. A measure of the changes in the price level over time that result from inflation.

Program agency. A government agency with overall responsibility for operating an E&T program.

Program group. The portion of a research sample comprising the cases accepted by or referred to an E&T program (cf. **comparison group, control group**).

Random assignment. An evaluation technique whereby people eligible for a program are assigned randomly to either of two groups — one that is subject to the program and allowed to receive program services (the treatment or program group) and one that is neither subject to the program nor allowed to receive program services (the control group). The purpose of random assignment is to ensure that any differences between the two groups, other than being subject to the program and receiving program services, is due to chance alone.

Regular costs. Costs that are essential to operating a program.

Sample. A representative subgroup of the cases that are eligible to participate in a program.

Special costs. Costs that are not essential to operating a program.

Start-up costs. The costs required to implement a new program (such as devising curriculum, writing regulations, developing computer software, and so forth) and incurred in learning how to operate a new program.

Steady state. A period of relative stability in the life of a program.

Straight-line depreciation. A procedure that allows the cost of durable goods to be spread equally over their years of useful life.

Support services. Payments made to or for program participants to help offset the costs of day care, transportation, and the like that they would otherwise bear as a result of participating in the program, or the direct provision of these services.

Time study. The use of a survey instrument to allocate staff time among program activities.

Treatment group. See **program group**.

Unit costs. Costs of providing a particular program component to one case over a specified time period.

Voluntary E&T program. An employment and training program to which eligible individuals apply. Some of those who apply may not be accepted into the program.

References and Further Reading

Boardman, Anthony E., David H. Greenberg, Aidan R. Vining, and David L. Weimer, *Cost-Benefit Analysis: Concepts and Practice* (Upper Saddle River, N.J.: Prentice-Hall, 1996).

Cave, George, and Fred Doolittle, *Assessing JOBSTART: Interim Impacts of a Program for School Dropouts* (New York: MDRC, 1991).

Cave, George, Fred Doolittle, Hans Bos, and Cyril Toussaint, *JOBSTART: Final Report on a Program for School Dropouts* (New York: MDRC, 1993).

Congressional Budget Office, *Work and Welfare: The Family Support Act of 1988* (Washington, D.C., 1989).

Freedman, Stephen, Daniel Friedlander, Winston Lin, and Amanda Schweder, The GAIN Evaluation. Working Paper 96.1, *Five-Year Impacts on Employment, Earnings, and AFDC Receipt* (New York: MDRC, 1996).

Friedlander, Daniel, David H. Greenberg, and Philip K. Robins, "Evaluating Government Training Programs for the Economically Disadvantaged," *Journal of Economic Literature* (December, 1997: pp. 1809-1855).

Goldman, Barbara, Daniel Friedlander, David Long, with Marjorie Erickson, and Judith Gueron, *California: Final Report on the San Diego Job Search and Work Experience Demonstration* (New York: MDRC, 1986).

Greenberg, David, and Mark Shroder, *The Digest of Social Experiments*, Second Edition (Washington, D.C.: The Urban Institute Press, 1997).

Hamilton, Gayle, Thomas Brock, Mary Farrell, Daniel Friedlander, and Kristen Harknett, *National Evaluation of Welfare-to-Work Strategies: Evaluating Two Welfare-to-Work Program Approaches — Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Site* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1997).

Jones, Kumen H., Jean B. Price, Michael L. Werner, and Martha S. Doran, *Introduction to Financial Accounting: A User Perspective* (Englewood Cliffs, N.J.: Prentice-Hall, 1996).

Kemple, James, Fred Doolittle, and John Wallace, *The National JTPA Study: Site Characteristics and Participation Patterns* (New York: MDRC, 1993).

Kemple, James, Veronica Fellerath, and Daniel Friedlander, *Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program* (New York: MDRC, 1995).

Meyers, Roy T., ed., *The Handbook of Government Budgeting* (San Francisco: Jossey-Bass, Forthcoming, 1998).

Mikesell, John L., *Fiscal Administration: Analysis and Applications for the Public Sector*, Fourth Edition (Belmont, CA: Wadsworth, 1994).

Miller, Cynthia, Virginia Knox, Patricia Auspos, Jo Anna Hunter-Manns, and Alan Orenstein, *Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program* (New York: MDRC, 1997).

Orr, Larry L., Howard S. Bloom, Stephen H. Bell, Fred Doolittle, Winston Lin, and George Cave, *Does Training for the Disadvantaged Work? Evidence from the National JTPA Study* (Washington, D.C.: The Urban Institute Press, 1996).

Powdar, Juliet Carol, *The Operating Budget: A Guide for Smaller Governments* (Chicago: Government Finance Officers Association, 1996).

Riccio, James, Daniel Friedlander, and Stephen Freedman, *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program* (New York: MDRC, 1994).

Scrivener, Susan, Gayle Hamilton, Mary Farrell, Stephen Freedman, Daniel Friedlander, Marisa Mitchell, Jodi Nudelman, and Christine Schwartz, *National Evaluation of Welfare-to-Work Strategies: Implementation, Participation Patterns, Costs, and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program* (Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Education, 1998).

Zedlewski, Sheila, and Isabel V. Sawhill, "Assessing the Personal Responsibility Act," *Welfare Reform Briefs*, No. 5 (Washington, D.C.: The Urban Institute Press, 1995).

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A study of local efforts to increase competition in the choice of providers of employment services for welfare recipients and other low-income populations. The project also provides assistance to cutting-edge local initiatives aimed at helping such people access and secure jobs.

Tulsa's IndEx Program: A Business-Led Initiative for Welfare Reform and Economic Development. 1997. Maria Buck.

Washington Works: Sustaining a Vision of Welfare Reform Based on Personal Change, Work Preparation, and Employer Involvement. 1998. Susan Gooden.

Jobs-Plus Initiative

A multi-site effort to greatly increase employment among public housing residents.

A Research Framework for Evaluating Jobs-Plus, a Saturation and Place-Based Employment Initiative for Public Housing Residents. 1998. James A. Riccio.

Section 3 Public Housing Study

An examination of the effectiveness of Section 3 of the 1968 Housing and Urban Development Act in affording employment opportunities for public housing residents.

Lessons from the Field on the Implementation of Section 3 (U.S. Department of Housing and Urban Development). 1996. Maxine Bailey, Suzanne Lynn.

Canada's Earnings Supplement Project

A test of an innovative financial incentive intended to expedite the reemployment of displaced workers and encourage full-year work by seasonal or part-year workers, thereby also reducing receipt of Unemployment Insurance.

Implementing the Earnings Supplement Project: A Test of a Re-employment Incentive (Social Research and Demonstration Corporation). 1997. Howard Bloom, Barbara Fink, Susanna Lui-Gurr, Wendy Bancroft, Doug Tattrie.

NOTE: For works not published by MDRC, the publisher's name is shown in parentheses. A complete publications list is available from MDRC and on its Web site (www.mdrc.org).

Reforming Welfare and Making Work Pay

ReWORKing Welfare: Technical Assistance for States and Localities

A multifaceted effort to assist states and localities in designing and implementing their welfare reform programs. The project includes a series of "how-to" guides, conferences, briefings, and customized, in-depth technical assistance.

After AFDC: Welfare-to-Work Choices and Challenges for States. 1997. Dan Bloom.

Changing to a Work First Strategy: Lessons from Los Angeles County's GAIN Program for Welfare Recipients. 1997. Evan Weissman.

Work First: How to Implement an Employment-Focused Approach to Welfare Reform. 1997. Amy Brown.

Business Partnerships: How to Involve Employers in Welfare Reform. 1998. Amy Brown, Maria Buck, Erik Skinner.

Time Limits

Connecticut's Jobs First Program

An evaluation of Connecticut's time-limited welfare program, which includes financial work incentives and requirements to participate in employment-related services aimed at rapid job placement. This study provides some of the earliest information on the effects of time limits in major urban areas.

Jobs First: Early Implementation of Connecticut's Welfare Reform Initiative. 1998. Dan Bloom, Mary Andes, Claudia Nicholson.

Florida's Family Transition Program

An evaluation of Florida's initial time-limited welfare program, which includes services, requirements, and financial work incentives intended to reduce long-term welfare receipt and help welfare recipients find and keep jobs.

The Family Transition Program: Implementation and Early Impacts of Florida's Initial Time-Limited Welfare Program. 1997. Dan Bloom, James J. Kemple, Robin Rogers-Dillon.

The Family Transition Program: Implementation and Interim Impacts of Florida's Initial Time-Limited Welfare Program. 1998. Dan Bloom, Mary Farrell, James J. Kemple, Nandita Verma.

Cross-State Study of Time-Limited Welfare

An examination of the implementation of some of the first state-initiated time-limited welfare programs.

Implementing Time-Limited Welfare: Early Experiences in Three States. 1995. Dan Bloom, David Butler.

The View from the Field: As Time Limits Approach, Welfare Recipients and Staff Talk About Their Attitudes and Expectations. 1997. Amy Brown, Dan Bloom, David Butler.

Financial Incentives

Minnesota Family Investment Program

An evaluation of Minnesota's welfare reform initiative, which aims to encourage work, alleviate poverty, and reduce welfare dependence.

MFIP: An Early Report on Minnesota's Approach to Welfare Reform. 1995. Virginia Knox, Amy Brown, Winston Lin.

Making Welfare Work and Work Pay: Implementation and 18-Month Impacts of the Minnesota Family Investment Program. 1997. Cynthia Miller, Virginia Knox, Patricia Auspos, Jo Anna Hunter-Manns, Alan Orenstein.

New Hope Project

A test of a community-based, work-focused antipoverty program and welfare alternative operating in Milwaukee.

The New Hope Offer: Participants in the New Hope Demonstration Discuss Work, Family, and Self-Sufficiency. 1996. Dudley Benoit.

Creating New Hope: Implementation of a Program to Reduce Poverty and Reform Welfare. 1997. Thomas Brock, Fred Doolittle, Veronica Fellerath, Michael Wiseman.

Who Got New Hope? 1997. Michael Wiseman.

An Early Look at Community Service Jobs in the New Hope Demonstration. 1998. Susan Poglinco, Julian Brash, Robert Granger.

Canada's Self-Sufficiency Project

A test of the effectiveness of a temporary earnings supplement on the employment and welfare receipt of public assistance recipients. Reports on the Self-Sufficiency Project are available from: Social Research and Demonstration Corporation (SRDC), 275 Slater St., Suite 900, Ottawa, Ontario K1P 5H9, Canada. Tel.: 613-237-4311; Fax: 613-237-5045. In the United States, the reports are also available from MDRC.

Creating an Alternative to Welfare: First-Year Findings on the Implementation, Welfare Impacts, and Costs of the Self-Sufficiency Project (Social Research and Demonstration Corporation [SRDC]). 1995. Tod Mijanovich, David Long.

The Struggle for Self-Sufficiency: Participants in the Self-Sufficiency Project Talk About Work, Welfare, and Their Futures (SRDC). 1995. Wendy Bancroft, Sheila Currie Vernon.

Do Financial Incentives Encourage Welfare Recipients to Work? Initial 18-Month Findings from the Self-Sufficiency Project (SRDC). 1996. David Card, Philip K. Robins.

When Work Pays Better Than Welfare: A Summary of the Self-Sufficiency Project's Implementation, Focus Group, and Initial 18-Month Impact Reports (SRDC). 1996.

How Important Are "Entry Effects" in Financial Incentive Programs for Welfare Recipients? Experimental Evidence from the Self-Sufficiency Project (SRDC). 1997. David Card, Philip K. Robins, Winston Lin.

Do Work Incentives Have Unintended Consequences? Measuring "Entry Effects" in the Self-Sufficiency Project (SRDC). 1998. Gordon Berlin, Wendy Bancroft, David Card, Winston Lin, Philip K. Robins.

Mandatory Welfare Employment Programs

National Evaluation of Welfare-to-Work Strategies

A large-scale study (formerly known as the JOBS Evaluation) of different strategies for moving people from welfare to employment.

Adult Education for People on AFDC: A Synthesis of Research (U.S. Department of Education [ED]/U.S. Department of Health and Human Services [HHS]). 1995. Edward Pauly.

Early Findings on Program Impacts in Three Sites (HHS/ED). 1995. Stephen Freedman, Daniel Friedlander.

Five Years After: The Long-Term Effects of Welfare-to-Work Programs (Russell Sage Foundation). 1995. Daniel Friedlander, Gary Burtless.

Monthly Participation Rates in Three Sites and Factors Affecting Participation Levels in Welfare-to-Work Programs (HHS/ED). 1995. Gayle Hamilton.

Changing to a Work First Strategy: Lessons from Los Angeles County's GAIN Program for Welfare Recipients. 1997. Evan Weissman.

Evaluating Two Welfare-to-Work Program Approaches: Two-Year Findings on the Labor Force Attachment and Human Capital Development Programs in Three Sites (HHS/ED). 1997. Gayle Hamilton, Thomas Brock, Mary Farrell, Daniel Friedlander, Kristen Harknett.

Work First: How to Implement an Employment-Focused Approach to Welfare Reform. 1997. Amy Brown.

Implementation, Participation Patterns, Costs and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program. (HHS/ED). 1998. Susan Scrivener, Gayle Hamilton, Mary Farrell, Stephen Freedman, Daniel Friedlander, Marisa Mitchell, Jodi Nudelman, Christine Schwartz.

Los Angeles's Jobs-First GAIN Program

An evaluation of Los Angeles's refocused GAIN (welfare-to-work) program, which emphasizes rapid employment. This is the first in-depth study of a full-scale "work first" program in one of the nation's largest urban areas.

Changing to a Work First Strategy: Lessons from Los Angeles County's GAIN Program for Welfare Recipients. 1997. Evan Weissman.

The Los Angeles Jobs-First GAIN Evaluation: Preliminary Findings on Participation Patterns and First-Year Impacts. 1998. Stephen Freedman, Marisa Mitchell, David Navarro. Working Paper.

Teen Parents on Welfare

Teenage Parent Programs: A Synthesis of the Long-Term Effects of the New Chance Demonstration, Ohio's Learning, Earning, and Parenting (LEAP) Program, and the Teenage Parent Demonstration (TPD). 1998. Robert Granger, Rachel Cytron.

Ohio's LEAP Program

An evaluation of Ohio's Learning, Earning, and Parenting (LEAP) Program, which uses financial incentives to encourage teenage parents on welfare to stay in or return to school.

LEAP: Three-Year Impacts of Ohio's Welfare Initiative to Improve School Attendance Among Teenage Parents. 1996. David Long, Judith M. Gueron, Robert G. Wood, Rebecca Fisher, Veronica Fellerath.

LEAP: Final Report on Ohio's Welfare Initiative to Improve School Attendance Among Teenage Parents. 1997. Johannes Bos, Veronica Fellerath.

New Chance Demonstration

A test of a comprehensive program of services that seeks to improve the economic status and general well-being of a group of highly disadvantaged young women and their children.

New Chance: Final Report on a Comprehensive Program for Young Mothers in Poverty and Their Children. 1997. Janet Quint, Johannes Bos, Denise Polit.

Parenting Behavior in a Sample of Young Mothers in Poverty: Results of the New Chance Observational Study. 1998. Martha Zaslow, Carolyn Eldred, editors.

Focusing on Fathers

Parents' Fair Share Demonstration

A demonstration for unemployed noncustodial parents (usually fathers) of children on welfare. PFS aims to improve the men's employment and earnings, reduce child poverty by increasing child support payments, and assist the fathers in playing a broader constructive role in their children's lives.

Low-Income Parents and the Parents' Fair Share Demonstration. 1996. Earl Johnson, Fred Doolittle.

Working with Low-Income Cases: Lessons for the Child Support Enforcement System from Parents' Fair Share. 1998. Fred Doolittle, Suzanne Lynn.

Other

Can They All Work? A Study of the Employment Potential of Welfare Recipients in a Welfare-to-Work Program. 1995. James A. Riccio, Stephen Freedman.

Florida's Project Independence: Benefits, Costs, and Two-Year Impacts of Florida's JOBS Program. 1995. James J. Kemple, Daniel Friedlander, Veronica Fellerath.

From Welfare to Work Among Lone Parents in Britain: Lessons for America. 1996. James A. Riccio.

Education Reform

School-to-Work Project

A study of innovative programs that help students make the transition from school to work or careers.

Home-Grown Lessons: Innovative Program Linking School and Work (Jossey-Bass Publishers). 1995. Edward Pauly, Hilary Kopp, Joshua Haimson.

Home-Grown Progress: The Evolution of Innovative School-to-Work Programs. 1997. Rachel A. Pedraza, Edward Pauly, Hilary Kopp.

Career Academies

The largest and most comprehensive evaluation of a school-to-work initiative, this 10-site study examines a promising approach to high school restructuring and the school-to-work transition.

Career Academies: Early Implementation Lessons from a 10-Site Evaluation. 1996. James J. Kemple, JoAnn Leah Rock.

Career Academies: Communities of Support for Students and Teachers — Emerging Findings from a 10-Site Evaluation. 1997. James J. Kemple.

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The Manpower Demonstration Research Corporation (MDRC) is a nonprofit social policy research organization founded in 1974 and located in New York City and San Francisco. Its mission is to design and rigorously field-test promising education and employment-related programs aimed at improving the well-being of disadvantaged adults and youth, and to provide policymakers and practitioners with reliable evidence on the effectiveness of social programs. Through this work, and its technical assistance to program administrators, MDRC seeks to enhance the quality of public policies and programs. MDRC actively disseminates the results of its research through its publications and through interchanges with a broad audience of policymakers and practitioners; state, local, and federal officials; program planners and operators; the funding community; educators; scholars; community and national organizations; the media; and the general public.

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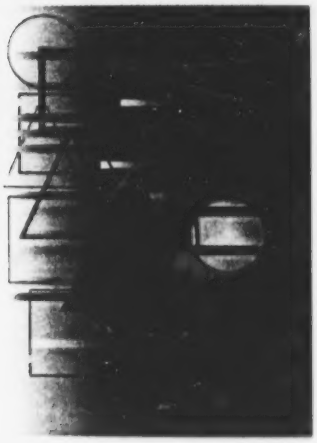
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